

ANALYTICAL REPORT

Job Number: 280-105950-1

Job Description: FAY-2018 Residential Sampling

For:

Chemours Company FC, LLC The
c/o AECOM
Sabre Building, Suite 300
4051 Ogletown Road
Newark, DE 19713

Attention: Michael Aucoin



Approved for release.
Michelle A Johnston
Project Manager II
2/19/2018 1:34 PM

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02/19/2018
Revision: 1

cc: Barbara McGraw
Kelly Rinehimer

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.

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Definitions/Glossary

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Denver

CASE NARRATIVE

Client: The Chemours Company FC, LLC

Project: FAY-2018 Residential Sampling

Report Number: 280-105950-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

For samples requiring analysis at a dilution, the dilution factor has been multiplied by the Method Detection Limit (MDL) for each analyte and evaluated versus the project-specific reporting limit (PSRL). If the obtained value is below the PSRL, then the PSRL is preserved as the reporting limit for the diluted result, otherwise, the obtained value becomes the reporting limit. This is done in order to maintain the PSRL to meet project requirements at the request of the client and to report the lowest possible RL for each analyte.

Revision - 2/19/2018

The client IDs for the following samples were changed to match the revised chain of custody received from the client on 2/15/2018.

FAY-D-196UPTON W1-1-013018 (280-105950-13) changed to FAY-D-196UPTON-W1-1-013018

FAY-D- 6740NC87H-W1-1-013018 (280-105950-33) changed to FAY-D-6740NC87H-W1-1-013018

FAY-D-3624PineB-W1-1-013018 (280-105950-37) changed to FAY-D-3624PNEBR-W1-1-013018

FAY-D-3624PineB-W1-2-013018D (280-105950-38) changed to FAY-D-3624PNEBR-W1-2-013018D

FAY-D-3624PineB-W1-2-013018 (280-105950-40) changed to FAY-D-3624PNEBR-W1-2-013018

Receipt

The samples were received on 1/31/2018 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.7° C, 0.7° C, 1.6° C, 2.2° C and 2.8° C.

Receipt Exceptions

The chain of custody lists sample FAY-D-3833Heart-W1-1-013018 twice with the same collection date/time, container count, and requested analysis in each instance. The laboratory received a total of 2 containers with this sample ID and logged them as one sample, FAY-D-3833Heart-W1-1-013018 (280-105950-35), for HFPO-DA analysis. The client was notified on 2/1/2018.

The chain of custody lists sample FAY-D-3833Heart-W1-2-013018 twice with the same collection date/time, container count, and requested analysis in each instance. The laboratory received a total of 4 containers with this sample ID and logged them as one sample, FAY-D-3833Heart-W1-2-013018 (280-105950-36), for HFPO-DA analysis. The client was notified on 2/1/2018.

The container count received by the laboratory for sample FAY-D-3833HEART-W1-1-013018D (280-105950-39) does not match the container count received by the laboratory. The laboratory received only two containers while the chain of custody lists four. Sufficient sample volume was received to proceed with the requested analysis. The client was notified on 2/1/2018.

The chain of custody lists a parent sample ID of FAY-D-3624PineB-W1-1-013018 with a collection date/time of 1/30/18 at 1528. Additional sample volume for MS/REP laboratory QC was received and listed on the chain of custody but the collection date/time and sample ID does not match the parent sample ID. The sample ID of the MS volume is listed as FAY-D-3624PineB-W1-2-013018 with a collection date/time of 1/30/18 at 1545. The sample ID of the REP volume is listed as FAY-D-3624PineB-W1-1-013018 with a collection date/time of 1/30/18 at 1545. The laboratory logged the MS/REP sample volume with a sample ID and collection date/time equivalent to the parent sample FAY-D-3624PineB-W1-1-013018 (280-105950-37) and will proceed unless instructed otherwise. The client was notified on 2/1/2018.

In accordance with the client's instructions received on 2/7/2018, the following changes were made to correct the afore mentioned laboratory actions regarding logging of sample volume from "3624PineB" sample location:

The 4 sample containers received labeled as FAY-D-3624PineB-W1-2-013018MS with collection date/time of 1/30/18 at 1545 and the 4 sample containers received labeled as FAY-D-3624PineB-W1-2-013018REP with collection date/time of 1/30/18 at 1545 were logged as parent sample FAY-D-3624PineB-W1-2-013018 (280-105950-40) (+MS/REP) with collection date/time of 1/30/18 at 1545. It can be noted that the original chain of custody incorrectly refers to sample ID FAY-D-3624PineB-W1-1-013018REP and also does not list a parent sample ID of FAY-D-3624PineB-W1-2-013018.

No other anomalies were observed during sample receipt.

Standards

Analytical standards were prepared using the acid form of the compound Perfluoro(2-propoxypropanoic) acid (HFPO-DA).

The surrogate compound, 13C3 HFPO-DA was introduced at the extraction step and was used as an internal standard for quantitation of HFPO-DA. The concentration of the surrogate spike is 0.2ug/L in water samples or 50ug/kg in soil samples.

Sample Extraction and Analysis

The samples presented in this report were extracted for the target analyte by TestAmerica Denver's SOP DV-OP-0019, Rev. 8 and analyzed for the target analyte by TestAmerica Denver's SOP DV-LC-0012, Rev. 14, with the exceptions of the items indicated in the DuPont QAS. Samples FAY-D-170MEDOW-W1-1-013018 (280-105950-14) and FAY-D-3624PNEBR-W1-2-013018 (280-105950-40) were chosen to be analyzed as duplicates and also to be spiked with the target analyte.

For water samples a 250mL aliquot of each sample is extracted using solid phase extraction technique with methanol conditioned Weak Anion Exchange cartridges. Each sample is spiked with the internal standard/surrogate, prior to extraction. After the sample is passed through the cartridge, the analytes are eluted with 2%Formic Acid, 6mLs of HPLC grade MeOH and then with 4mL of 10% ammonium hydroxide in methanol. The final volume is brought to 5mL using reagent water and the extract is analyzed by LC/MS/MS.

The target analyte is separated from other components on a high-performance liquid chromatography (HPLC) C18 column with a mobile phase mixture of water containing 0.1% ammonium acetate and methanol. The mass spectrometer detector is operated in the electrospray (ESI) negative ion mode. The instrument is calibrated at 7 concentration levels (0.2, 0.5, 1.0, 2.0, 5.0, 10 and 20ug/L). The target analyte is detected as the perfluoro(2-propoxypropanoic) acid with the parent ion of 328.8 amu. The daughter ions used for analysis by LC/MS/MS are at 284.8 amu. The ratio of the peak areas to the two ions must be $\pm 20\%$ of the ion ratios in the mid-point ICAL for qualitative identification. Sample results are quantitated using the internal standard dilution.

Tuning and Calibration

The instrument is tuned with a solution of the target analyte such that mass assignments are within ± 0.5 amu of the daughter ions. The instrument is calibrated with seven concentration levels from 0.2ug/L to 20ug/L. Linear regression ($y=ax+b$) or quadratic functions ($y=ax+cx^2+b$) are used with a correlation coefficient or coefficient of determination ≥ 0.990 .

Following initial calibration (ICAL), an initial calibration blank (ICB) is tested, which consists of methanol spiked with the surrogate. The result for the target analyte must be less than one half the reporting limit (RL) to proceed.

Next an initial calibration verification (ICV) standard is tested. This is a mid-level concentration standard from a different vendor from the ICAL standard. If a different vendor is not available then, a different lot number from the same vendor is used. The ICV must be within 80-120% of the true value.

The quantitation limit verification standard is a standard from the same source as the ICAL tested run at the RL level to determine accuracy near the detection limit. This recovery must be within 70-130%.

Continuing calibration verification (CCV) standards are tested every 10 injections and are from the same source as the ICAL and are at mid-level concentration. The recovery of the CCVs must be 70-130% or recalibration is necessary.

Method QC Samples

The Method Blank is processed reagent water spiked with internal standard and prepared with each batch of 20 samples of the same matrix. All samples in the batch are processed at the same time and with the same reagents. The method blank must be less than the LOD or associated batch samples must be re-extracted and reanalyzed.

Each batch is prepared with a low- and a mid-level concentration spike Laboratory Control Samples (LCS). The recoveries of these samples must be within 70-130% or associated batch samples must be re-extracted and reanalyzed. If the recovery is biased high and samples are non-detect, results can be reported without re-extraction.

Calculations

Sample Result Calculation

For internal standard quantitation,

$$\text{HFPO-DA Response} = \text{Area of HFPO-DA} * 13\text{C3 HFPO-DA concentration} / \text{area of } 13\text{C3 HFPO-DA}$$

Concentration in waters, ug/L = $(C_{ex} V_t) / (V_o)$

Where:

C_{ex} = Concentration measured in sample extract from the target analyte response (ng/mL)

V_t = Volume of total extract (mL)

V_o = Volume of water extracted (mL)

2. Percent Recovery Calculation

$$\text{Spike Recovery} = (SSR - SR) / (SA) * 100\%$$

Where:

SSR = Spike sample result

SR = Sample result

SA = Spike added

3. Relative Percent Difference Calculation

$$RPD = (SR - DR)/(1/2(SR+DR)) \times 100$$

Where:

SR = Sample result

DR = Duplicate result

HFPO-DA Analysis Anomalies

Samples FAY-D-3516HEART-W1-1-013018 (280-105950-1), FAY-D-3516HEART-W1-2-013018 (280-105950-2), FAY-D-3521HEART-W1-1-013018 (280-105950-3), FAY-D-3521HEART-W1-2-013018 (280-105950-4), FAY-D-3619HEART-W1-1-013018 (280-105950-5), FAY-D-3619HEART-W1-2-013018 (280-105950-6), FAY-D-3615HEART-W1-1-013018 (280-105950-7), FAY-D-3615HEART-W1-2-013018 (280-105950-8), FAY-D-3634HEART-W1-1-013018 (280-105950-9), FAY-D-3634HEART-W1-2-013018 (280-105950-10), FAY-D-FB-013018 (280-105950-11), FAY-D-46MEDOW-W1-1-013018 (280-105950-12), FAY-D-196UPTON-W1-1-013018 (280-105950-13), FAY-D-170MEDOW-W1-1-013018 (280-105950-14), FAY-D-170MEDOW-W1-1-013018-D (280-105950-15), FAY-D-102UPTON-W1-1-013018 (280-105950-16), FAY-D-121HILLT-W1-1-013018 (280-105950-17), FAY-D-99DRYES-W1-1-013018 (280-105950-18), FAY-D-6110CHKFT-W1-1-013018 (280-105950-19), FAY-D-6695CHKFT-W1-1-013018 (280-105950-20), FAY-D-3662HEART-W1-1-013018 (280-105950-21), FAY-D-3662HEART-W1-2-013018 (280-105950-22), FAY-D-3655HEART-W1-1-013018 (280-105950-23), FAY-D-3655HEART-W1-2-013018 (280-105950-24), FAY-D-3720HEART-W1-1-013018 (280-105950-25), FAY-D-3720HEART-W2-1-013018 (280-105950-26), FAY-D-3721HEART-W1-1-013018 (280-105950-27), FAY-D-3721HEART-W1-2-013018 (280-105950-28), FAY-D-3745HEART-W1-1-013018 (280-105950-29), FAY-D-3745HEART-W1-2-013018 (280-105950-30), FAY-D-3765HEART-W1-1-013018 (280-105950-31), FAY-D-6676NC87H-W1-1-013018 (280-105950-32), FAY-D-6740NC87H-W1-1-013018 (280-105950-33), FAY-D-6740NC87H-W1-2-013018 (280-105950-34), FAY-D-3833Heart-W1-1-013018 (280-105950-35), FAY-D-3833Heart-W1-2-013018 (280-105950-36), FAY-D-3624PNEBR-W1-1-013018 (280-105950-37), FAY-D-3624PNEBR-W1-2-013018D (280-105950-38), FAY-D-3833HEART-W1-1-013018D (280-105950-39) and FAY-D-3624PNEBR-W1-2-013018 (280-105950-40) were analyzed for Perfluorinated Hydrocarbons in accordance with DV-LC-0012. The samples were prepared on 02/06/2018, 02/07/2018 and 02/08/2018 and analyzed on 02/07/2018, 02/08/2018 and 02/09/2018.

Calibration 9 (STD125) has been included in the raw data, but was not used in the Initial Calibration (ICAL).

Reporting limits have been adjusted accordingly for the initial volumes extracted.

During the solid phase extraction process, the following sample clogged the cartridge: FAY-D-3615HEART-W1-1-013018 (280-105950-7).

The project required MS and Sample Duplicate could not be performed for prep batch 280-403988, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3516HEART-W1-1-013018	280-105950-1	1/30/2018 8:25	1/31/2018	2/7/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

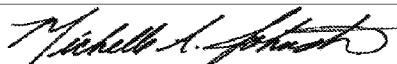
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

The project required MS and Sample Duplicate could not be performed for prep batch 280-403988, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3516HEART-W1-2-013018	280-105950-2	1/30/2018 8:23	1/31/2018	2/7/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

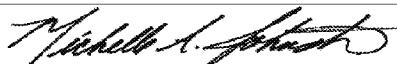
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

The project required MS and Sample Duplicate could not be performed for prep batch 280-403988, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3521HEART-W1-1-013018	280-105950-3	1/30/2018 8:46	1/31/2018	2/7/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

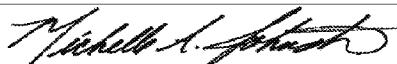
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

The project required MS and Sample Duplicate could not be performed for prep batch 280-403988, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3521HEART-W1-2-013018	280-105950-4	1/30/2018 11:33	1/31/2018	2/7/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

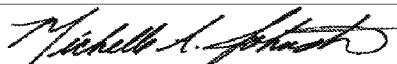
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

The project required MS and Sample Duplicate could not be performed for prep batch 280-403988, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

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2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3619HEART-W1-1-013018	280-105950-5	1/30/2018 9:09	1/31/2018	2/7/2018	0.030

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

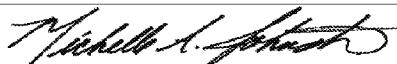
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

The project required MS and Sample Duplicate could not be performed for prep batch 280-403988, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

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Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3619HEART-W1-2-013018	280-105950-6	1/30/2018 9:10	1/31/2018	2/7/2018	0.021

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

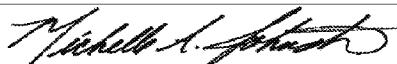
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

The project required MS and Sample Duplicate could not be performed for prep batch 280-403988, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

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Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3615HEART-W1-1-013018	280-105950-7	1/30/2018 9:34	1/31/2018	2/7/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

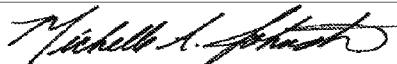
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

The project required MS and Sample Duplicate could not be performed for prep batch 280-403988, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3615HEART-W1-2-013018	280-105950-8	1/30/2018 9:35	1/31/2018	2/7/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

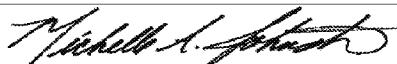
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

The project required MS and Sample Duplicate could not be performed for prep batch 280-403988, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3634HEART-W1-1-013018	280-105950-9	1/30/2018 10:02	1/31/2018	2/7/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

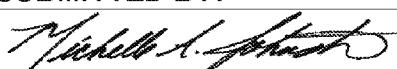
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

The project required MS and Sample Duplicate could not be performed for prep batch 280-403988, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3634HEART-W1-2-013018	280-105950-10	1/30/2018 10:03	1/31/2018	2/7/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

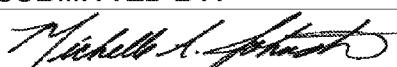
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

The project required MS and Sample Duplicate could not be performed for prep batch 280-403988, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-FB-013018	280-105950-11	1/30/2018 13:00	1/31/2018	2/7/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

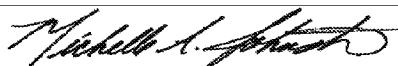
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

The project required MS and Sample Duplicate could not be performed for prep batch 280-403988, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-46MEDOW-W1-1-013018	280-105950-12	1/30/2018 8:30	1/31/2018	2/7/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

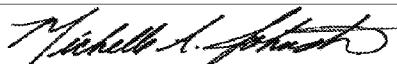
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

The project required MS and Sample Duplicate could not be performed for prep batch 280-403988, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-196UPTON-W1-1-013018	280-105950-13	1/30/2018 8:58	1/31/2018	2/8/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/19/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-170MEDOW-W1-1-013018	280-105950-14	1/30/2018 9:17	1/31/2018	2/8/2018	0.022

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

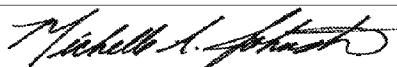
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-170MEDOW-W1-1-013018-D	280-105950-15	1/30/2018 9:17	1/31/2018	2/8/2018	0.021

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-102UPTON-W1-1-013018	280-105950-16	1/30/2018 9:52	1/31/2018	2/8/2018	0.022

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-121HILLT-W1-1-013018	280-105950-17	1/30/2018 10:15	1/31/2018	2/8/2018	0.12

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-99DRYES-W1-1-013018	280-105950-18	1/30/2018 11:16	1/31/2018	2/8/2018	0.050

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-6110CHKFT-W1-1-013018	280-105950-19	1/30/2018 11:58	1/31/2018	2/8/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

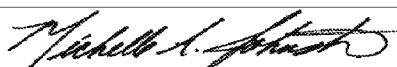
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-6695CHKFT-W1-1-013018	280-105950-20	1/30/2018 15:20	1/31/2018	2/8/2018	0.071

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3662HEART-W1-1-013018	280-105950-21	1/30/2018 10:31	1/31/2018	2/8/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3662HEART-W1-2-013018	280-105950-22	1/30/2018 10:34	1/31/2018	2/8/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3655HEART-W1-1-013018	280-105950-23	1/30/2018 10:55	1/31/2018	2/8/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3655HEART-W1-2-013018	280-105950-24	1/30/2018 10:56	1/31/2018	2/8/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3720HEART-W1-1-013018	280-105950-25	1/30/2018 11:25	1/31/2018	2/8/2018	0.012

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

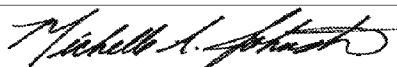
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3720HEART-W2-1-013018	280-105950-26	1/30/2018 13:36	1/31/2018	2/8/2018	0.016

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3721HEART-W1-1-013018	280-105950-27	1/30/2018 13:46	1/31/2018	2/8/2018	0.014

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3721HEART-W1-2-013018	280-105950-28	1/30/2018 13:50	1/31/2018	2/8/2018	<0.010

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

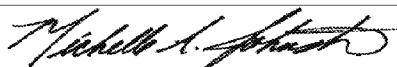
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3745HEART-W1-1-013018	280-105950-29	1/30/2018 14:08	1/31/2018	2/8/2018	0.014

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3745HEART-W1-2-013018	280-105950-30	1/30/2018 14:09	1/31/2018	2/8/2018	0.012

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-14	81%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3765HEART-W1-1-013018	280-105950-31	1/30/2018 14:42	1/31/2018	2/9/2018	0.062

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

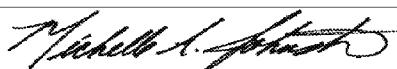
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-40	84%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-6676NC87H-W1-1-013018	280-105950-32	1/30/2018 10:02	1/31/2018	2/9/2018	0.011

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-40	84%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-6740NC87H-W1-1-013018	280-105950-33	1/30/2018 10:11	1/31/2018	2/9/2018	0.038

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-40	84%

SUBMITTED BY:

2/19/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-6740NC87H-W1-2-013018	280-105950-34	1/30/2018 10:25	1/31/2018	2/9/2018	0.031

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-40	84%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3833Heart-W1-1-013018	280-105950-35	1/30/2018 16:20	1/31/2018	2/9/2018	0.054

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-40	84%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3833Heart-W1-2-013018	280-105950-36	1/30/2018 16:21	1/31/2018	2/9/2018	0.052

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-40	84%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3624PNEBR-W1-1-013018	280-105950-37	1/30/2018 15:28	1/31/2018	2/9/2018	0.11

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-40	84%

SUBMITTED BY:

2/19/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3624PNEBR-W1-2-013018D	280-105950-38	1/30/2018 15:45	1/31/2018	2/9/2018	0.11

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

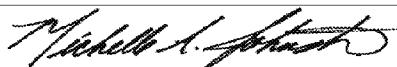
For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-40	84%

SUBMITTED BY:

2/19/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3833HEART-W1-1-013018D	280-105950-39	1/30/2018 16:20	1/31/2018	2/9/2018	0.064

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-40	84%

SUBMITTED BY:

2/13/2018

Michelle A. Johnston, Project Manager

Date

Fluorochemical Characterization of Water Samples Analytical Results

Chemours Sample Identification	TestAmerica Sample Identification	Collection Date/Time	Date Sample Received by TestAmerica	Analysis Date	HFPO-DA# (ug/L**)
FAY-D-3624PNEBR-W1-2-013018	280-105950-40	1/30/2018 15:45	1/31/2018	2/9/2018	0.10

HFPO-DA – hexafluoropropylene oxide dimer acid, analyzed by method DV-LC-0012, Revision 14.

< = less than the stated value

** ug/L – micrograms/liter (parts per billion)

DEFINITIONS:

Reporting Limit (RL) for the procedure is approximately 0.010ug/L.

RESULTS ARE CALCULATED ACCORDING TO THE FOLLOWING CRITERIA:

For samples analyzed in duplicate:

If the sample and laboratory duplicate are greater than 5X RL, the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the sample or laboratory duplicate are less than 5X RL, and the absolute difference is less than RL, the average value is reported. If the absolute difference is greater than the RL, the higher value is reported.

Matrix Spike Recoveries:**Acceptable Range: 70%-130%**

TestAmerica Sample ID	Matrix Spike Recoveries
280-105950-40	84%

SUBMITTED BY:

2/19/2018

Michelle A. Johnston, Project Manager

Date

Executive Summary

Client: Chemours Company FC, LLC The

Job Number: 280-105950-1

8321A : HFPO-DA

Lab Sample ID	Client Sample ID	Analyte	Individual Result (ug/L)	Final Result (ug/L)	RL
280-105950-1	FAY-D-3516HEART-W1-1-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-2	FAY-D-3516HEART-W1-2-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-3	FAY-D-3521HEART-W1-1-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-4	FAY-D-3521HEART-W1-2-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-5	FAY-D-3619HEART-W1-1-013018	HFPO-DA	0.030	0.030	0.010
280-105950-6	FAY-D-3619HEART-W1-2-013018	HFPO-DA	0.021	0.021	0.010
280-105950-7	FAY-D-3615HEART-W1-1-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-8	FAY-D-3615HEART-W1-2-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-9	FAY-D-3634HEART-W1-1-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-10	FAY-D-3634HEART-W1-2-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-11	FAY-D-FB-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-12	FAY-D-46MEDOW-W1-1-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-13	FAY-D-196UPTON-W1-1-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-14	FAY-D-170MEDOW-W1-1-013018	HFPO-DA	0.021	0.022	0.010
280-105950-14 DU	FAY-D-170MEDOW-W1-1-013018	HFPO-DA	0.022		0.010
280-105950-15	FAY-D-170MEDOW-W1-1-013018-D	HFPO-DA	0.021	0.021	0.010
280-105950-16	FAY-D-102UPTON-W1-1-013018	HFPO-DA	0.022	0.022	0.010
280-105950-17	FAY-D-121HILLT-W1-1-013018	HFPO-DA	0.12	0.12	0.010
280-105950-18	FAY-D-99DRYES-W1-1-013018	HFPO-DA	0.050	0.050	0.010
280-105950-19	FAY-D-6110CHKFT-W1-1-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-20	FAY-D-6695CHKFT-W1-1-013018	HFPO-DA	0.071	0.071	0.010
280-105950-21	FAY-D-3662HEART-W1-1-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-22	FAY-D-3662HEART-W1-2-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-23	FAY-D-3655HEART-W1-1-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-24	FAY-D-3655HEART-W1-2-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-25	FAY-D-3720HEART-W1-1-013018	HFPO-DA	0.012	0.012	0.010
280-105950-26	FAY-D-3720HEART-W2-1-013018	HFPO-DA	0.016	0.016	0.010
280-105950-27	FAY-D-3721HEART-W1-1-013018	HFPO-DA	0.014	0.014	0.010
280-105950-28	FAY-D-3721HEART-W1-2-013018	HFPO-DA	<0.010	<0.010	0.010
280-105950-29	FAY-D-3745HEART-W1-1-013018	HFPO-DA	0.014	0.014	0.010
280-105950-30	FAY-D-3745HEART-W1-2-013018	HFPO-DA	0.012	0.012	0.010
280-105950-31	FAY-D-3765HEART-W1-1-013018	HFPO-DA	0.062	0.062	0.010
280-105950-32	FAY-D-6676NC87H-W1-1-013018	HFPO-DA	0.011	0.011	0.010
280-105950-33	FAY-D-6740NC87H-W1-1-013018	HFPO-DA	0.038	0.038	0.010
280-105950-34	FAY-D-6740NC87H-W1-2-013018	HFPO-DA	0.031	0.031	0.010
280-105950-35	FAY-D-3833Heart-W1-1-013018	HFPO-DA	0.054	0.054	0.010
280-105950-36	FAY-D-3833Heart-W1-2-013018	HFPO-DA	0.052	0.052	0.010
280-105950-37	FAY-D-3624PNEBR-W1-1-013018	HFPO-DA	0.11	0.11	0.010
280-105950-38	FAY-D-3624PNEBR-W1-2-013018D	HFPO-DA	0.11	0.11	0.010
280-105950-39	FAY-D-3833HEART-W1-1-013018D	HFPO-DA	0.064	0.064	0.010
280-105950-40	FAY-D-3624PNEBR-W1-2-013018	HFPO-DA	0.10	0.10	0.010

(a) Method 8321A

(b) DUP or REP indicates a laboratory duplicate.

(c) If the sample and laboratory duplicate are both greater than 5X the RL and the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher of the sample and laboratory duplicate value is reported. If the sample and/or laboratory duplicate are less than 5X the RL, and the absolute difference between the sample and laboratory duplicate is less than the RL, the average value is reported. If the absolute difference is greater than the RL, the higher of the sample and laboratory duplicate value is reported. If either the sample or the duplicate result is greater than or equal to the RL and the other is less than the RL, then the higher of the two is reported.

(d) Moisture Determined by ASTM D2216.

(e) Reporting Limit (RL) = The concentration equivalent to the low calibration standard.

Executive Summary

Client: Chemours Company FC, LLC The

Job Number: 280-105950-1

8321A : HFPO-DA

Lab Sample ID	Client Sample ID	Analyte	Individual Result (ug/L)	Final Result (ug/L)	RL
280-105950-40 DU	FAY-D-3624PNEBR-W1-2-013018	HFPO-DA	0.11	0.010	0.010

- (a) Method 8321A
- (b) DUP or REP indicates a laboratory duplicate.
- (c) If the sample and laboratory duplicate are both greater than 5X the RL and the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher of the sample and laboratory duplicate value is reported. If the sample and/or laboratory duplicate are less than 5X the RL, and the absolute difference between the sample and laboratory duplicate is less than the RL, the average value is reported. If the absolute difference is greater than the RL, the higher of the sample and laboratory duplicate value is reported. If either the sample or the duplicate result is greater than or equal to the RL and the other is less than the RL, then the higher of the two is reported.
- (d) Moisture Determined by ASTM D2216.
- (e) Reporting Limit (RL) = The concentration equivalent to the low calibration standard.

Detection Summary

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3516HEART-W1-1-013018

Lab Sample ID: 280-105950-1

No Detections.

Client Sample ID: FAY-D-3516HEART-W1-2-013018

Lab Sample ID: 280-105950-2

No Detections.

Client Sample ID: FAY-D-3521HEART-W1-1-013018

Lab Sample ID: 280-105950-3

No Detections.

Client Sample ID: FAY-D-3521HEART-W1-2-013018

Lab Sample ID: 280-105950-4

No Detections.

Client Sample ID: FAY-D-3619HEART-W1-1-013018

Lab Sample ID: 280-105950-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.030		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3619HEART-W1-2-013018

Lab Sample ID: 280-105950-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.021		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3615HEART-W1-1-013018

Lab Sample ID: 280-105950-7

No Detections.

Client Sample ID: FAY-D-3615HEART-W1-2-013018

Lab Sample ID: 280-105950-8

No Detections.

Client Sample ID: FAY-D-3634HEART-W1-1-013018

Lab Sample ID: 280-105950-9

No Detections.

Client Sample ID: FAY-D-3634HEART-W1-2-013018

Lab Sample ID: 280-105950-10

No Detections.

Client Sample ID: FAY-D-FB-013018

Lab Sample ID: 280-105950-11

No Detections.

Client Sample ID: FAY-D-46MEDOW-W1-1-013018

Lab Sample ID: 280-105950-12

No Detections.

Client Sample ID: FAY-D-196UPTON-W1-1-013018

Lab Sample ID: 280-105950-13

No Detections.

Client Sample ID: FAY-D-170MEDOW-W1-1-013018

Lab Sample ID: 280-105950-14

This Detection Summary does not include radiochemical test results.

TestAmerica Denver

Detection Summary

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-170MEDOW-W1-1-013018
(Continued)

Lab Sample ID: 280-105950-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.021		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-170MEDOW-W1-1-013018-D

Lab Sample ID: 280-105950-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.021		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-102UPTON-W1-1-013018

Lab Sample ID: 280-105950-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.022		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-121HILLT-W1-1-013018

Lab Sample ID: 280-105950-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.12		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-99DRYES-W1-1-013018

Lab Sample ID: 280-105950-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.050		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-6110CHKFT-W1-1-013018

Lab Sample ID: 280-105950-19

No Detections.

Client Sample ID: FAY-D-6695CHKFT-W1-1-013018

Lab Sample ID: 280-105950-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.071		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3662HEART-W1-1-013018

Lab Sample ID: 280-105950-21

No Detections.

Client Sample ID: FAY-D-3662HEART-W1-2-013018

Lab Sample ID: 280-105950-22

No Detections.

Client Sample ID: FAY-D-3655HEART-W1-1-013018

Lab Sample ID: 280-105950-23

No Detections.

Client Sample ID: FAY-D-3655HEART-W1-2-013018

Lab Sample ID: 280-105950-24

No Detections.

Client Sample ID: FAY-D-3720HEART-W1-1-013018

Lab Sample ID: 280-105950-25

This Detection Summary does not include radiochemical test results.

TestAmerica Denver

Detection Summary

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3720HEART-W1-1-013018
(Continued)

Lab Sample ID: 280-105950-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.012		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3720HEART-W2-1-013018

Lab Sample ID: 280-105950-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.016		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3721HEART-W1-1-013018

Lab Sample ID: 280-105950-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.014		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3721HEART-W1-2-013018

Lab Sample ID: 280-105950-28

No Detections.

Client Sample ID: FAY-D-3745HEART-W1-1-013018

Lab Sample ID: 280-105950-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.014		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3745HEART-W1-2-013018

Lab Sample ID: 280-105950-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.012		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3765HEART-W1-1-013018

Lab Sample ID: 280-105950-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.062		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-6676NC87H-W1-1-013018

Lab Sample ID: 280-105950-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.011		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-6740NC87H-W1-1-013018

Lab Sample ID: 280-105950-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.038		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-6740NC87H-W1-2-013018

Lab Sample ID: 280-105950-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.031		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3833Heart-W1-1-013018

Lab Sample ID: 280-105950-35

This Detection Summary does not include radiochemical test results.

TestAmerica Denver

Detection Summary

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3833Heart-W1-1-013018 (Continued)

Lab Sample ID: 280-105950-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.054		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3833Heart-W1-2-013018

Lab Sample ID: 280-105950-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.052		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3624PNEBR-W1-1-013018

Lab Sample ID: 280-105950-37

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.11		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3624PNEBR-W1-2-013018D

Lab Sample ID: 280-105950-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.11		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3833HEART-W1-1-013018D

Lab Sample ID: 280-105950-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.064		0.010		ug/L	1		8321A	Total/NA

Client Sample ID: FAY-D-3624PNEBR-W1-2-013018

Lab Sample ID: 280-105950-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HFPO-DA	0.10		0.010		ug/L	1		8321A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3516HEART-W1-1-013018

Lab Sample ID: 280-105950-1

Date Collected: 01/30/18 08:25

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/06/18 09:31	02/07/18 09:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		50 - 200				02/06/18 09:31	02/07/18 09:08	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3516HEART-W1-2-013018

Lab Sample ID: 280-105950-2

Date Collected: 01/30/18 08:23

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/06/18 09:31	02/07/18 09:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	104		50 - 200				02/06/18 09:31	02/07/18 09:11	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3521HEART-W1-1-013018

Lab Sample ID: 280-105950-3

Date Collected: 01/30/18 08:46

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/06/18 09:31	02/07/18 09:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	103		50 - 200				02/06/18 09:31	02/07/18 09:15	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3521HEART-W1-2-013018

Lab Sample ID: 280-105950-4

Date Collected: 01/30/18 11:33

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/06/18 09:31	02/07/18 09:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	93		50 - 200				02/06/18 09:31	02/07/18 09:18	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3619HEART-W1-1-013018

Lab Sample ID: 280-105950-5

Date Collected: 01/30/18 09:09

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.030		0.010		ug/L		02/06/18 09:31	02/07/18 09:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	100		50 - 200				02/06/18 09:31	02/07/18 09:21	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3619HEART-W1-2-013018

Lab Sample ID: 280-105950-6

Date Collected: 01/30/18 09:10

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.021		0.010		ug/L		02/06/18 09:31	02/07/18 09:25	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3 HFPO-DA	106		50 - 200				02/06/18 09:31	02/07/18 09:25	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3615HEART-W1-1-013018

Lab Sample ID: 280-105950-7

Date Collected: 01/30/18 09:34

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/06/18 09:31	02/07/18 09:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	104		50 - 200				02/06/18 09:31	02/07/18 09:31	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3615HEART-W1-2-013018

Lab Sample ID: 280-105950-8

Date Collected: 01/30/18 09:35

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/06/18 09:31	02/07/18 09:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		50 - 200				02/06/18 09:31	02/07/18 09:34	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3634HEART-W1-1-013018

Lab Sample ID: 280-105950-9

Date Collected: 01/30/18 10:02

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/06/18 09:31	02/07/18 09:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	103		50 - 200				02/06/18 09:31	02/07/18 09:38	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3634HEART-W1-2-013018

Lab Sample ID: 280-105950-10

Date Collected: 01/30/18 10:03

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/06/18 09:31	02/07/18 09:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	104		50 - 200				02/06/18 09:31	02/07/18 09:41	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-FB-013018

Lab Sample ID: 280-105950-11

Date Collected: 01/30/18 13:00

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/06/18 09:31	02/07/18 09:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	105		50 - 200				02/06/18 09:31	02/07/18 09:44	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-46MEDOW-W1-1-013018

Lab Sample ID: 280-105950-12

Date Collected: 01/30/18 08:30

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/06/18 09:31	02/07/18 09:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	112		50 - 200				02/06/18 09:31	02/07/18 09:47	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-196UPTON-W1-1-013018

Lab Sample ID: 280-105950-13

Date Collected: 01/30/18 08:58

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/07/18 10:33	02/08/18 14:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	112		50 - 200				02/07/18 10:33	02/08/18 14:03	1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-170MEDOW-W1-1-013018

Lab Sample ID: 280-105950-14

Date Collected: 01/30/18 09:17

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.021		0.010		ug/L		02/07/18 10:33	02/08/18 14:07	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3 HFPO-DA	115		50 - 200				02/07/18 10:33	02/08/18 14:07	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-170MEDOW-W1-1-013018-D

Lab Sample ID: 280-105950-15

Date Collected: 01/30/18 09:17

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.021		0.010		ug/L		02/07/18 10:33	02/08/18 14:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

13C3 HFPO-DA

111

50 - 200

02/07/18 10:33

02/08/18 14:20

1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-102UPTON-W1-1-013018

Lab Sample ID: 280-105950-16

Date Collected: 01/30/18 09:52

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.022		0.010		ug/L		02/07/18 10:33	02/08/18 14:23	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3 HFPO-DA	114		50 - 200				02/07/18 10:33	02/08/18 14:23	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-121HILLT-W1-1-013018

Lab Sample ID: 280-105950-17

Date Collected: 01/30/18 10:15

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.12		0.010		ug/L		02/07/18 10:33	02/08/18 14:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

13C3 HFPO-DA

112

50 - 200

02/07/18 10:33

02/08/18 14:26

1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-99DRYES-W1-1-013018

Lab Sample ID: 280-105950-18

Date Collected: 01/30/18 11:16

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.050		0.010		ug/L		02/07/18 10:33	02/08/18 14:29	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3 HFPO-DA	110		50 - 200				02/07/18 10:33	02/08/18 14:29	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-6110CHKFT-W1-1-013018

Lab Sample ID: 280-105950-19

Date Collected: 01/30/18 11:58

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/07/18 10:33	02/08/18 14:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	109		50 - 200				02/07/18 10:33	02/08/18 14:33	1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-6695CHKFT-W1-1-013018

Lab Sample ID: 280-105950-20

Date Collected: 01/30/18 15:20

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.071		0.010		ug/L		02/07/18 10:33	02/08/18 14:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	110		50 - 200				02/07/18 10:33	02/08/18 14:36	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3662HEART-W1-1-013018

Lab Sample ID: 280-105950-21

Date Collected: 01/30/18 10:31

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/07/18 10:33	02/08/18 14:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	111		50 - 200				02/07/18 10:33	02/08/18 14:39	1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3662HEART-W1-2-013018

Lab Sample ID: 280-105950-22

Date Collected: 01/30/18 10:34

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/07/18 10:33	02/08/18 14:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	105		50 - 200				02/07/18 10:33	02/08/18 14:42	1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3655HEART-W1-1-013018

Lab Sample ID: 280-105950-23

Date Collected: 01/30/18 10:55

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/07/18 10:33	02/08/18 14:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	114		50 - 200				02/07/18 10:33	02/08/18 14:46	1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3655HEART-W1-2-013018

Lab Sample ID: 280-105950-24

Date Collected: 01/30/18 10:56

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/07/18 10:33	02/08/18 14:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	116		50 - 200				02/07/18 10:33	02/08/18 14:49	1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3720HEART-W1-1-013018

Lab Sample ID: 280-105950-25

Date Collected: 01/30/18 11:25

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.012		0.010		ug/L		02/07/18 10:33	02/08/18 14:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

13C3 HFPO-DA

111 50 - 200

02/07/18 10:33 02/08/18 14:56 1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3720HEART-W2-1-013018

Lab Sample ID: 280-105950-26

Date Collected: 01/30/18 13:36

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.016		0.010		ug/L		02/07/18 10:33	02/08/18 14:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

13C3 HFPO-DA

110 50 - 200

02/07/18 10:33 02/08/18 14:59 1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3721HEART-W1-1-013018

Lab Sample ID: 280-105950-27

Date Collected: 01/30/18 13:46

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.014		0.010		ug/L		02/07/18 10:33	02/08/18 15:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

13C3 HFPO-DA

111

50 - 200

02/07/18 10:33

02/08/18 15:02

1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3721HEART-W1-2-013018

Lab Sample ID: 280-105950-28

Date Collected: 01/30/18 13:50

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/07/18 10:33	02/08/18 15:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	111		50 - 200				02/07/18 10:33	02/08/18 15:05	1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3745HEART-W1-1-013018

Lab Sample ID: 280-105950-29

Date Collected: 01/30/18 14:08

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.014		0.010		ug/L		02/07/18 10:33	02/08/18 15:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

13C3 HFPO-DA

111

50 - 200

02/07/18 10:33

02/08/18 15:09

1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3745HEART-W1-2-013018

Lab Sample ID: 280-105950-30

Date Collected: 01/30/18 14:09

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.012		0.010		ug/L		02/07/18 10:33	02/08/18 15:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

13C3 HFPO-DA

119

50 - 200

02/07/18 10:33

02/08/18 15:12

1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3765HEART-W1-1-013018

Lab Sample ID: 280-105950-31

Date Collected: 01/30/18 14:42

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.062		0.010		ug/L		02/08/18 17:57	02/09/18 10:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

13C3 HFPO-DA

87

50 - 200

02/08/18 17:57

02/09/18 10:10

1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-6676NC87H-W1-1-013018

Lab Sample ID: 280-105950-32

Date Collected: 01/30/18 10:02

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.011		0.010		ug/L		02/08/18 17:57	02/09/18 10:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	87		50 - 200				02/08/18 17:57	02/09/18 10:13	1

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-6740NC87H-W1-1-013018

Lab Sample ID: 280-105950-33

Date Collected: 01/30/18 10:11

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.038		0.010		ug/L		02/08/18 17:57	02/09/18 10:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	90		50 - 200				02/08/18 17:57	02/09/18 10:16	1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-6740NC87H-W1-2-013018

Lab Sample ID: 280-105950-34

Date Collected: 01/30/18 10:25

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.031		0.010		ug/L		02/08/18 17:57	02/09/18 10:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

13C3 HFPO-DA

92

50 - 200

02/08/18 17:57

02/09/18 10:20

1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3833Heart-W1-1-013018

Lab Sample ID: 280-105950-35

Date Collected: 01/30/18 16:20

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.054		0.010		ug/L		02/08/18 17:57	02/09/18 10:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

13C3 HFPO-DA

92

50 - 200

02/08/18 17:57

02/09/18 10:23

1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3833Heart-W1-2-013018

Lab Sample ID: 280-105950-36

Date Collected: 01/30/18 16:21

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.052		0.010		ug/L		02/08/18 17:57	02/09/18 10:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

13C3 HFPO-DA

102

50 - 200

02/08/18 17:57

02/09/18 10:26

1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3624PNEBR-W1-1-013018

Lab Sample ID: 280-105950-37

Date Collected: 01/30/18 15:28

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.11		0.010		ug/L		02/08/18 17:57	02/09/18 10:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	95		50 - 200				02/08/18 17:57	02/09/18 10:33	1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3624PNEBR-W1-2-013018D

Lab Sample ID: 280-105950-38

Date Collected: 01/30/18 15:45

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.11		0.010		ug/L		02/08/18 17:57	02/09/18 10:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	90		50 - 200				02/08/18 17:57	02/09/18 10:36	1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3833HEART-W1-1-013018D

Lab Sample ID: 280-105950-39

Date Collected: 01/30/18 16:20

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.064		0.010		ug/L		02/08/18 17:57	02/09/18 10:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

13C3 HFPO-DA

86

50 - 200

02/08/18 17:57

02/09/18 10:39

1

TestAmerica Denver

Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3624PNEBR-W1-2-013018

Lab Sample ID: 280-105950-40

Date Collected: 01/30/18 15:45

Matrix: Water

Date Received: 01/31/18 09:40

Method: 8321A - HFPO-DA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	0.10		0.010		ug/L		02/08/18 17:57	02/09/18 10:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	91		50 - 200				02/08/18 17:57	02/09/18 10:42	1

TestAmerica Denver

Default Detection Limits

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Method: 8321A - HFPO-DA

Prep: 3535

Analyte	RL	MDL	Units	Method
HFPO-DA	0.010	0.0051	ug/L	8321A

TestAmerica Denver

Surrogate Summary

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Method: 8321A - HFPO-DA

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

HFPODA

(50-200)

Lab Sample ID	Client Sample ID	HFPODA (50-200)
280-105950-1	FAY-D-3516HEART-W1-1-0130	102
280-105950-2	FAY-D-3516HEART-W1-2-0130	104
280-105950-3	FAY-D-3521HEART-W1-1-0130	103
280-105950-4	FAY-D-3521HEART-W1-2-0130	93
280-105950-5	FAY-D-3619HEART-W1-1-0130	100
280-105950-6	FAY-D-3619HEART-W1-2-0130	106
280-105950-7	FAY-D-3615HEART-W1-1-0130	104
280-105950-8	FAY-D-3615HEART-W1-2-0130	102
280-105950-9	FAY-D-3634HEART-W1-1-0130	103
280-105950-10	FAY-D-3634HEART-W1-2-0130	104
280-105950-11	FAY-D-FB-013018	105
280-105950-12	FAY-D-46MEDOW-W1-1-01301	112
280-105950-13	FAY-D-196UPTON-W1-1-01301	112
280-105950-14	FAY-D-170MEDOW-W1-1-0130	115
280-105950-14 DU	FAY-D-170MEDOW-W1-1-0130	112
280-105950-14 MS	FAY-D-170MEDOW-W1-1-0130	112
280-105950-15	FAY-D-170MEDOW-W1-1-0130	111
280-105950-16	FAY-D-102UPTON-W1-1-01301	114
280-105950-17	FAY-D-121HILLT-W1-1-013018	112
280-105950-18	FAY-D-99DRYES-W1-1-013018	110
280-105950-19	FAY-D-6110CHKFT-W1-1-0130	109
280-105950-20	FAY-D-6695CHKFT-W1-1-0130	110
280-105950-21	FAY-D-3662HEART-W1-1-0130	111
280-105950-22	FAY-D-3662HEART-W1-2-0130	105
280-105950-23	FAY-D-3655HEART-W1-1-0130	114
280-105950-24	FAY-D-3655HEART-W1-2-0130	116
280-105950-25	FAY-D-3720HEART-W1-1-0130	111
280-105950-26	FAY-D-3720HEART-W2-1-0130	110
280-105950-27	FAY-D-3721HEART-W1-1-0130	111
280-105950-28	FAY-D-3721HEART-W1-2-0130	111
280-105950-29	FAY-D-3745HEART-W1-1-0130	111
280-105950-30	FAY-D-3745HEART-W1-2-0130	119
280-105950-31	FAY-D-3765HEART-W1-1-0130	87
280-105950-32	FAY-D-6676NC87H-W1-1-0130	87
280-105950-33	FAY-D-6740NC87H-W1-1-0130	90
280-105950-34	FAY-D-6740NC87H-W1-2-0130	92
280-105950-35	FAY-D-3833Heart-W1-1-013018	92
280-105950-36	FAY-D-3833Heart-W1-2-013018	102
280-105950-37	FAY-D-3624PNEBR-W1-1-0130	95
280-105950-38	FAY-D-3624PNEBR-W1-2-0130	90
280-105950-39	FAY-D-3833HEART-W1-1-0130	86
280-105950-40	FAY-D-3624PNEBR-W1-2-0130	91
280-105950-40 DU	FAY-D-3624PNEBR-W1-2-0130	89
280-105950-40 MS	FAY-D-3624PNEBR-W1-2-0130	119
DLCK 280-390728/12	Lab Control Sample	102
DLCK 280-404345/13	Lab Control Sample	104
LCS 280-403988/2-A	Lab Control Sample	99
LCS 280-404157/2-A	Lab Control Sample	112
LCS 280-404355/2-A	Lab Control Sample	92

TestAmerica Denver

Surrogate Summary

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Method: 8321A - HFPO-DA (Continued)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

HFPODA (50-200)

Lab Sample ID	Client Sample ID	HFPODA (50-200)
LCSD 280-403988/3-A	Lab Control Sample Dup	102
LCSD 280-404157/3-A	Lab Control Sample Dup	119
LCSD 280-404355/3-A	Lab Control Sample Dup	105
LLCS 280-403988/4-A	Lab Control Sample	102
LLCS 280-404157/4-A	Lab Control Sample	119
LLCS 280-404355/4-A	Lab Control Sample	92
MB 280-403988/1-A	Method Blank	104
MB 280-404157/1-A	Method Blank	112
MB 280-404355/1-A	Method Blank	96

Surrogate Legend

HFPODA = 13C3 HFPO-DA

TestAmerica Denver

QC Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Method: 8321A - HFPO-DA

Lab Sample ID: DLCK 280-390728/12

Matrix: Water

Analysis Batch: 390728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	DLCK Result	DLCK Qualifier	Unit	D	% Rec.	% Rec. Limits
HFPO-DA	0.250	<0.50		ug/L		78	70 - 130
Surrogate	DLCK %Recovery	DLCK Qualifier	Limits				
13C3 HFPO-DA	102		50 - 200				

Lab Sample ID: MB 280-403988/1-A

Matrix: Water

Analysis Batch: 404182

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 403988

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HFPO-DA	<0.010		0.010		ug/L		02/06/18 09:31	02/07/18 08:19	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	104		50 - 200				02/06/18 09:31	02/07/18 08:19	1

Lab Sample ID: LCS 280-403988/2-A

Matrix: Water

Analysis Batch: 404182

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 403988

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec.	% Rec. Limits
HFPO-DA	0.200	0.173		ug/L		86	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
13C3 HFPO-DA	99		50 - 200				

Lab Sample ID: LCSD 280-403988/3-A

Matrix: Water

Analysis Batch: 404182

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 403988

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec.	% Rec. Limits	RPD	Limit
HFPO-DA	0.200	0.171		ug/L		85	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
13C3 HFPO-DA	102		50 - 200						

Lab Sample ID: LLCS 280-403988/4-A

Matrix: Water

Analysis Batch: 404182

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 403988

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	% Rec.	% Rec. Limits
HFPO-DA	0.0200	0.0139		ug/L		70	70 - 130
Surrogate	LLCS %Recovery	LLCS Qualifier	Limits				
13C3 HFPO-DA	102		50 - 200				

TestAmerica Denver

QC Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Method: 8321A - HFPO-DA (Continued)

Lab Sample ID: MB 280-404157/1-A

Matrix: Water

Analysis Batch: 404346

Analyte	MB	MB			RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
HFPO-DA	<0.010				0.010		ug/L		02/07/18 10:33	02/08/18 13:44	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	112				50 - 200				02/07/18 10:33	02/08/18 13:44	1

Lab Sample ID: LCS 280-404157/2-A

Matrix: Water

Analysis Batch: 404346

Analyte	Spike			LCS	LCS	Unit	D	%Rec.	Limits	
	Added	Result	Qualifier							
HFPO-DA	0.200	0.160		ug/L				80	70 - 130	
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits					
13C3 HFPO-DA	112				50 - 200					

Lab Sample ID: LCSD 280-404157/3-A

Matrix: Water

Analysis Batch: 404346

Analyte	Spike			LCSD	LCSD	Unit	D	%Rec.	Limits	RPD
	Added	Result	Qualifier							
HFPO-DA	0.200	0.160		ug/L				80	70 - 130	0
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits					
13C3 HFPO-DA	119				50 - 200					

Lab Sample ID: LLCS 280-404157/4-A

Matrix: Water

Analysis Batch: 404346

Analyte	Spike			LLCS	LLCS	Unit	D	%Rec.	Limits	
	Added	Result	Qualifier							
HFPO-DA	0.0200	0.0148		ug/L				74	70 - 130	
Surrogate	LLCS	LLCS	%Recovery	Qualifier	Limits					
13C3 HFPO-DA	119				50 - 200					

Lab Sample ID: 280-105950-14 MS

Matrix: Water

Analysis Batch: 404346

Analyte	Sample	Sample	Spike			MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier						
HFPO-DA	0.021		0.198	0.183		ug/L			81	70 - 130	
Surrogate	MS	MS	%Recovery	Qualifier	Limits						
13C3 HFPO-DA	112				50 - 200						

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 404157

% Rec.

RPD

Limit

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 404157

% Rec.

RPD

Limit

TestAmerica Denver

QC Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Method: 8321A - HFPO-DA (Continued)

Lab Sample ID: 280-105950-14 DU

Matrix: Water

Analysis Batch: 404346

Client Sample ID: FAY-D-170MEDOW-W1-1-013018

Prep Type: Total/NA

Prep Batch: 404157

RPD

Limit

Analyte	Sample	Sample	DU	DU	D	RPD	Limit
	Result	Qualifier	Result	Qualifier			
HFPO-DA	0.021		0.0220		ug/L	4	20
Surrogate							
Surrogate	DU	DU	%Recovery	Qualifier	Limits	% Rec.	Limits
	112				50 - 200		

Lab Sample ID: DLCK 280-404345/13

Matrix: Water

Analysis Batch: 404345

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	DLCK	DLCK	D	% Rec.	Limits
	Added	Result	Qualifier			
HFPO-DA	0.250	<0.50		ug/L	90	70 - 130
Surrogate						
Surrogate	DLCK	DLCK	%Recovery	Qualifier	Limits	% Rec.
	104				50 - 200	

Lab Sample ID: MB 280-404355/1-A

Matrix: Water

Analysis Batch: 404457

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 404355

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
HFPO-DA	<0.010		0.010	ug/L			02/08/18 17:57	02/09/18 09:21	1
Surrogate									
Surrogate	MB	MB	%Recovery	Qualifier	Limits	D	Prepared	Analyzed	Dil Fac
	96				50 - 200		02/08/18 17:57	02/09/18 09:21	1

Lab Sample ID: LCS 280-404355/2-A

Matrix: Water

Analysis Batch: 404457

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 404355

Analyte	Spike	LCS	LCS	D	% Rec.	Limits
	Added	Result	Qualifier			
HFPO-DA	0.200	0.227		ug/L	114	70 - 130
Surrogate						
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Dil Fac
	92				50 - 200	

Lab Sample ID: LCSD 280-404355/3-A

Matrix: Water

Analysis Batch: 404457

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 404355

Analyte	Spike	LCSD	LCSD	D	% Rec.	Limits	RPD	Limit
	Added	Result	Qualifier					
HFPO-DA	0.200	0.212		ug/L	106	70 - 130	7	20
Surrogate								
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits	Dil Fac	RPD	Limit
	105				50 - 200			

TestAmerica Denver

QC Sample Results

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Method: 8321A - HFPO-DA (Continued)

Lab Sample ID: LLCS 280-404355/4-A

Matrix: Water

Analysis Batch: 404457

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 404355

% Rec.

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	% Rec.	Limits
HFPO-DA	0.0200	0.0203		ug/L		101	70 - 130
<i>Surrogate</i>	<i>LLCS %Recovery</i>	<i>LLCS Qualifier</i>	<i>Limits</i>				
13C3 HFPO-DA	92		50 - 200				

Lab Sample ID: 280-105950-40 MS

Matrix: Water

Analysis Batch: 404457

Client Sample ID: FAY-D-3624PNEBR-W1-2-013018

Prep Type: Total/NA

Prep Batch: 404355

% Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec.	Limits
HFPO-DA	0.10		0.191	0.261		ug/L		84	70 - 130
<i>Surrogate</i>	<i>MS %Recovery</i>	<i>MS Qualifier</i>	<i>Limits</i>						
13C3 HFPO-DA	119		50 - 200						

Lab Sample ID: 280-105950-40 DU

Matrix: Water

Analysis Batch: 404457

Client Sample ID: FAY-D-3624PNEBR-W1-2-013018

Prep Type: Total/NA

Prep Batch: 404355

RPD

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
HFPO-DA	0.10		0.109		ug/L		8	20
<i>Surrogate</i>	<i>DU %Recovery</i>	<i>DU Qualifier</i>	<i>Limits</i>					
13C3 HFPO-DA	89		50 - 200					

TestAmerica Denver

QC Association Summary

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

LCMS

Analysis Batch: 390728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
DLCK 280-390728/12	Lab Control Sample	Total/NA	Water	8321A	

Prep Batch: 403988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105950-1	FAY-D-3516HEART-W1-1-013018	Total/NA	Water	3535	
280-105950-2	FAY-D-3516HEART-W1-2-013018	Total/NA	Water	3535	
280-105950-3	FAY-D-3521HEART-W1-1-013018	Total/NA	Water	3535	
280-105950-4	FAY-D-3521HEART-W1-2-013018	Total/NA	Water	3535	
280-105950-5	FAY-D-3619HEART-W1-1-013018	Total/NA	Water	3535	
280-105950-6	FAY-D-3619HEART-W1-2-013018	Total/NA	Water	3535	
280-105950-7	FAY-D-3615HEART-W1-1-013018	Total/NA	Water	3535	
280-105950-8	FAY-D-3615HEART-W1-2-013018	Total/NA	Water	3535	
280-105950-9	FAY-D-3634HEART-W1-1-013018	Total/NA	Water	3535	
280-105950-10	FAY-D-3634HEART-W1-2-013018	Total/NA	Water	3535	
280-105950-11	FAY-D-FB-013018	Total/NA	Water	3535	
280-105950-12	FAY-D-46MEDOW-W1-1-013018	Total/NA	Water	3535	
MB 280-403988/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-403988/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-403988/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LLCS 280-403988/4-A	Lab Control Sample	Total/NA	Water	3535	

Prep Batch: 404157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105950-13	FAY-D-196UPTON-W1-1-013018	Total/NA	Water	3535	
280-105950-14	FAY-D-170MEDOW-W1-1-013018	Total/NA	Water	3535	
280-105950-15	FAY-D-170MEDOW-W1-1-013018-D	Total/NA	Water	3535	
280-105950-16	FAY-D-102UPTON-W1-1-013018	Total/NA	Water	3535	
280-105950-17	FAY-D-121HILLT-W1-1-013018	Total/NA	Water	3535	
280-105950-18	FAY-D-99DRYES-W1-1-013018	Total/NA	Water	3535	
280-105950-19	FAY-D-6110CHKFT-W1-1-013018	Total/NA	Water	3535	
280-105950-20	FAY-D-6695CHKFT-W1-1-013018	Total/NA	Water	3535	
280-105950-21	FAY-D-3662HEART-W1-1-013018	Total/NA	Water	3535	
280-105950-22	FAY-D-3662HEART-W1-2-013018	Total/NA	Water	3535	
280-105950-23	FAY-D-3655HEART-W1-1-013018	Total/NA	Water	3535	
280-105950-24	FAY-D-3655HEART-W1-2-013018	Total/NA	Water	3535	
280-105950-25	FAY-D-3720HEART-W1-1-013018	Total/NA	Water	3535	
280-105950-26	FAY-D-3720HEART-W2-1-013018	Total/NA	Water	3535	
280-105950-27	FAY-D-3721HEART-W1-1-013018	Total/NA	Water	3535	
280-105950-28	FAY-D-3721HEART-W1-2-013018	Total/NA	Water	3535	
280-105950-29	FAY-D-3745HEART-W1-1-013018	Total/NA	Water	3535	
280-105950-30	FAY-D-3745HEART-W1-2-013018	Total/NA	Water	3535	
MB 280-404157/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-404157/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-404157/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LLCS 280-404157/4-A	Lab Control Sample	Total/NA	Water	3535	
280-105950-14 MS	FAY-D-170MEDOW-W1-1-013018	Total/NA	Water	3535	
280-105950-14 DU	FAY-D-170MEDOW-W1-1-013018	Total/NA	Water	3535	

Analysis Batch: 404182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105950-1	FAY-D-3516HEART-W1-1-013018	Total/NA	Water	8321A	403988

TestAmerica Denver

QC Association Summary

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

LCMS (Continued)

Analysis Batch: 404182 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105950-2	FAY-D-3516HEART-W1-2-013018	Total/NA	Water	8321A	403988
280-105950-3	FAY-D-3521HEART-W1-1-013018	Total/NA	Water	8321A	403988
280-105950-4	FAY-D-3521HEART-W1-2-013018	Total/NA	Water	8321A	403988
280-105950-5	FAY-D-3619HEART-W1-1-013018	Total/NA	Water	8321A	403988
280-105950-6	FAY-D-3619HEART-W1-2-013018	Total/NA	Water	8321A	403988
280-105950-7	FAY-D-3615HEART-W1-1-013018	Total/NA	Water	8321A	403988
280-105950-8	FAY-D-3615HEART-W1-2-013018	Total/NA	Water	8321A	403988
280-105950-9	FAY-D-3634HEART-W1-1-013018	Total/NA	Water	8321A	403988
280-105950-10	FAY-D-3634HEART-W1-2-013018	Total/NA	Water	8321A	403988
280-105950-11	FAY-D-FB-013018	Total/NA	Water	8321A	403988
280-105950-12	FAY-D-46MEDOW-W1-1-013018	Total/NA	Water	8321A	403988
MB 280-403988/1-A	Method Blank	Total/NA	Water	8321A	403988
LCS 280-403988/2-A	Lab Control Sample	Total/NA	Water	8321A	403988
LCSD 280-403988/3-A	Lab Control Sample Dup	Total/NA	Water	8321A	403988
LLCS 280-403988/4-A	Lab Control Sample	Total/NA	Water	8321A	403988

Analysis Batch: 404345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
DLCK 280-404345/13	Lab Control Sample	Total/NA	Water	8321A	

Analysis Batch: 404346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105950-13	FAY-D-196UPTON-W1-1-013018	Total/NA	Water	8321A	404157
280-105950-14	FAY-D-170MEDOW-W1-1-013018	Total/NA	Water	8321A	404157
280-105950-15	FAY-D-170MEDOW-W1-1-013018-D	Total/NA	Water	8321A	404157
280-105950-16	FAY-D-102UPTON-W1-1-013018	Total/NA	Water	8321A	404157
280-105950-17	FAY-D-121HILLT-W1-1-013018	Total/NA	Water	8321A	404157
280-105950-18	FAY-D-99DRYES-W1-1-013018	Total/NA	Water	8321A	404157
280-105950-19	FAY-D-6110CHKFT-W1-1-013018	Total/NA	Water	8321A	404157
280-105950-20	FAY-D-6695CHKFT-W1-1-013018	Total/NA	Water	8321A	404157
280-105950-21	FAY-D-3662HEART-W1-1-013018	Total/NA	Water	8321A	404157
280-105950-22	FAY-D-3662HEART-W1-2-013018	Total/NA	Water	8321A	404157
280-105950-23	FAY-D-3655HEART-W1-1-013018	Total/NA	Water	8321A	404157
280-105950-24	FAY-D-3655HEART-W1-2-013018	Total/NA	Water	8321A	404157
280-105950-25	FAY-D-3720HEART-W1-1-013018	Total/NA	Water	8321A	404157
280-105950-26	FAY-D-3720HEART-W2-1-013018	Total/NA	Water	8321A	404157
280-105950-27	FAY-D-3721HEART-W1-1-013018	Total/NA	Water	8321A	404157
280-105950-28	FAY-D-3721HEART-W1-2-013018	Total/NA	Water	8321A	404157
280-105950-29	FAY-D-3745HEART-W1-1-013018	Total/NA	Water	8321A	404157
280-105950-30	FAY-D-3745HEART-W1-2-013018	Total/NA	Water	8321A	404157
MB 280-404157/1-A	Method Blank	Total/NA	Water	8321A	404157
LCS 280-404157/2-A	Lab Control Sample	Total/NA	Water	8321A	404157
LCSD 280-404157/3-A	Lab Control Sample Dup	Total/NA	Water	8321A	404157
LLCS 280-404157/4-A	Lab Control Sample	Total/NA	Water	8321A	404157
280-105950-14 MS	FAY-D-170MEDOW-W1-1-013018	Total/NA	Water	8321A	404157
280-105950-14 DU	FAY-D-170MEDOW-W1-1-013018	Total/NA	Water	8321A	404157

Prep Batch: 404355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105950-31	FAY-D-3765HEART-W1-1-013018	Total/NA	Water	3535	
280-105950-32	FAY-D-6676NC87H-W1-1-013018	Total/NA	Water	3535	

TestAmerica Denver

QC Association Summary

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

LCMS (Continued)

Prep Batch: 404355 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105950-33	FAY-D-6740NC87H-W1-1-013018	Total/NA	Water	3535	
280-105950-34	FAY-D-6740NC87H-W1-2-013018	Total/NA	Water	3535	
280-105950-35	FAY-D-3833Heart-W1-1-013018	Total/NA	Water	3535	
280-105950-36	FAY-D-3833Heart-W1-2-013018	Total/NA	Water	3535	
280-105950-37	FAY-D-3624PNEBR-W1-1-013018	Total/NA	Water	3535	
280-105950-38	FAY-D-3624PNEBR-W1-2-013018D	Total/NA	Water	3535	
280-105950-39	FAY-D-3833HEART-W1-1-013018D	Total/NA	Water	3535	
280-105950-40	FAY-D-3624PNEBR-W1-2-013018	Total/NA	Water	3535	
MB 280-404355/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-404355/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-404355/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LLCS 280-404355/4-A	Lab Control Sample	Total/NA	Water	3535	
280-105950-40 MS	FAY-D-3624PNEBR-W1-2-013018	Total/NA	Water	3535	
280-105950-40 DU	FAY-D-3624PNEBR-W1-2-013018	Total/NA	Water	3535	

Analysis Batch: 404457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105950-31	FAY-D-3765HEART-W1-1-013018	Total/NA	Water	8321A	404355
280-105950-32	FAY-D-6676NC87H-W1-1-013018	Total/NA	Water	8321A	404355
280-105950-33	FAY-D-6740NC87H-W1-1-013018	Total/NA	Water	8321A	404355
280-105950-34	FAY-D-6740NC87H-W1-2-013018	Total/NA	Water	8321A	404355
280-105950-35	FAY-D-3833Heart-W1-1-013018	Total/NA	Water	8321A	404355
280-105950-36	FAY-D-3833Heart-W1-2-013018	Total/NA	Water	8321A	404355
280-105950-37	FAY-D-3624PNEBR-W1-1-013018	Total/NA	Water	8321A	404355
280-105950-38	FAY-D-3624PNEBR-W1-2-013018D	Total/NA	Water	8321A	404355
280-105950-39	FAY-D-3833HEART-W1-1-013018D	Total/NA	Water	8321A	404355
280-105950-40	FAY-D-3624PNEBR-W1-2-013018	Total/NA	Water	8321A	404355
MB 280-404355/1-A	Method Blank	Total/NA	Water	8321A	404355
LCS 280-404355/2-A	Lab Control Sample	Total/NA	Water	8321A	404355
LCSD 280-404355/3-A	Lab Control Sample Dup	Total/NA	Water	8321A	404355
LLCS 280-404355/4-A	Lab Control Sample	Total/NA	Water	8321A	404355
280-105950-40 MS	FAY-D-3624PNEBR-W1-2-013018	Total/NA	Water	8321A	404355
280-105950-40 DU	FAY-D-3624PNEBR-W1-2-013018	Total/NA	Water	8321A	404355

TestAmerica Denver

Lab Chronicle

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3516HEART-W1-1-013018

Lab Sample ID: 280-105950-1

Date Collected: 01/30/18 08:25

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			234.5 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 09:08	AGCM	TAL DEN

Client Sample ID: FAY-D-3516HEART-W1-2-013018

Lab Sample ID: 280-105950-2

Date Collected: 01/30/18 08:23

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			253.2 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 09:11	AGCM	TAL DEN

Client Sample ID: FAY-D-3521HEART-W1-1-013018

Lab Sample ID: 280-105950-3

Date Collected: 01/30/18 08:46

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			241.5 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 09:15	AGCM	TAL DEN

Client Sample ID: FAY-D-3521HEART-W1-2-013018

Lab Sample ID: 280-105950-4

Date Collected: 01/30/18 11:33

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			239.4 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 09:18	AGCM	TAL DEN

Client Sample ID: FAY-D-3619HEART-W1-1-013018

Lab Sample ID: 280-105950-5

Date Collected: 01/30/18 09:09

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			248.4 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 09:21	AGCM	TAL DEN

Client Sample ID: FAY-D-3619HEART-W1-2-013018

Lab Sample ID: 280-105950-6

Date Collected: 01/30/18 09:10

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			241.5 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 09:25	AGCM	TAL DEN

TestAmerica Denver

Lab Chronicle

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3615HEART-W1-1-013018

Lab Sample ID: 280-105950-7

Matrix: Water

Date Collected: 01/30/18 09:34

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			243.4 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 09:31	AGCM	TAL DEN

Client Sample ID: FAY-D-3615HEART-W1-2-013018

Lab Sample ID: 280-105950-8

Matrix: Water

Date Collected: 01/30/18 09:35

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			237.1 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 09:34	AGCM	TAL DEN

Client Sample ID: FAY-D-3634HEART-W1-1-013018

Lab Sample ID: 280-105950-9

Matrix: Water

Date Collected: 01/30/18 10:02

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			245.4 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 09:38	AGCM	TAL DEN

Client Sample ID: FAY-D-3634HEART-W1-2-013018

Lab Sample ID: 280-105950-10

Matrix: Water

Date Collected: 01/30/18 10:03

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			244.8 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 09:41	AGCM	TAL DEN

Client Sample ID: FAY-D-FB-013018

Lab Sample ID: 280-105950-11

Matrix: Water

Date Collected: 01/30/18 13:00

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			253.5 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 09:44	AGCM	TAL DEN

Client Sample ID: FAY-D-46MEDOW-W1-1-013018

Lab Sample ID: 280-105950-12

Matrix: Water

Date Collected: 01/30/18 08:30

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			245 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 09:47	AGCM	TAL DEN

TestAmerica Denver

Lab Chronicle

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-196UPTON-W1-1-013018

Lab Sample ID: 280-105950-13

Date Collected: 01/30/18 08:58

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			252.9 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:03	AGCM	TAL DEN

Client Sample ID: FAY-D-170MEDOW-W1-1-013018

Lab Sample ID: 280-105950-14

Date Collected: 01/30/18 09:17

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			255.3 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:07	AGCM	TAL DEN

Client Sample ID: FAY-D-170MEDOW-W1-1-013018-D

Lab Sample ID: 280-105950-15

Date Collected: 01/30/18 09:17

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			229.9 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:20	AGCM	TAL DEN

Client Sample ID: FAY-D-102UPTON-W1-1-013018

Lab Sample ID: 280-105950-16

Date Collected: 01/30/18 09:52

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			248.5 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:23	AGCM	TAL DEN

Client Sample ID: FAY-D-121HILLT-W1-1-013018

Lab Sample ID: 280-105950-17

Date Collected: 01/30/18 10:15

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			254.8 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:26	AGCM	TAL DEN

Client Sample ID: FAY-D-99DRYES-W1-1-013018

Lab Sample ID: 280-105950-18

Date Collected: 01/30/18 11:16

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			248.6 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:29	AGCM	TAL DEN

TestAmerica Denver

Lab Chronicle

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-6110CHKFT-W1-1-013018

Lab Sample ID: 280-105950-19

Date Collected: 01/30/18 11:58

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250.3 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:33	AGCM	TAL DEN

Client Sample ID: FAY-D-6695CHKFT-W1-1-013018

Lab Sample ID: 280-105950-20

Date Collected: 01/30/18 15:20

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			245.5 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:36	AGCM	TAL DEN

Client Sample ID: FAY-D-3662HEART-W1-1-013018

Lab Sample ID: 280-105950-21

Date Collected: 01/30/18 10:31

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			239.3 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:39	AGCM	TAL DEN

Client Sample ID: FAY-D-3662HEART-W1-2-013018

Lab Sample ID: 280-105950-22

Date Collected: 01/30/18 10:34

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			252.4 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:42	AGCM	TAL DEN

Client Sample ID: FAY-D-3655HEART-W1-1-013018

Lab Sample ID: 280-105950-23

Date Collected: 01/30/18 10:55

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			254.9 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:46	AGCM	TAL DEN

Client Sample ID: FAY-D-3655HEART-W1-2-013018

Lab Sample ID: 280-105950-24

Date Collected: 01/30/18 10:56

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			249 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:49	AGCM	TAL DEN

TestAmerica Denver

Lab Chronicle

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3720HEART-W1-1-013018

Lab Sample ID: 280-105950-25

Date Collected: 01/30/18 11:25

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			254.2 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:56	AGCM	TAL DEN

Client Sample ID: FAY-D-3720HEART-W2-1-013018

Lab Sample ID: 280-105950-26

Date Collected: 01/30/18 13:36

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			258 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:59	AGCM	TAL DEN

Client Sample ID: FAY-D-3721HEART-W1-1-013018

Lab Sample ID: 280-105950-27

Date Collected: 01/30/18 13:46

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			255.9 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 15:02	AGCM	TAL DEN

Client Sample ID: FAY-D-3721HEART-W1-2-013018

Lab Sample ID: 280-105950-28

Date Collected: 01/30/18 13:50

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			247.6 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 15:05	AGCM	TAL DEN

Client Sample ID: FAY-D-3745HEART-W1-1-013018

Lab Sample ID: 280-105950-29

Date Collected: 01/30/18 14:08

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			247.4 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 15:09	AGCM	TAL DEN

Client Sample ID: FAY-D-3745HEART-W1-2-013018

Lab Sample ID: 280-105950-30

Date Collected: 01/30/18 14:09

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			254.9 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 15:12	AGCM	TAL DEN

TestAmerica Denver

Lab Chronicle

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3765HEART-W1-1-013018

Lab Sample ID: 280-105950-31

Date Collected: 01/30/18 14:42

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			281.9 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 10:10	AGCM	TAL DEN

Client Sample ID: FAY-D-6676NC87H-W1-1-013018

Lab Sample ID: 280-105950-32

Date Collected: 01/30/18 10:02

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			288.7 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 10:13	AGCM	TAL DEN

Client Sample ID: FAY-D-6740NC87H-W1-1-013018

Lab Sample ID: 280-105950-33

Date Collected: 01/30/18 10:11

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			252 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 10:16	AGCM	TAL DEN

Client Sample ID: FAY-D-6740NC87H-W1-2-013018

Lab Sample ID: 280-105950-34

Date Collected: 01/30/18 10:25

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			297.3 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 10:20	AGCM	TAL DEN

Client Sample ID: FAY-D-3833Heart-W1-1-013018

Lab Sample ID: 280-105950-35

Date Collected: 01/30/18 16:20

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			277.3 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 10:23	AGCM	TAL DEN

Client Sample ID: FAY-D-3833Heart-W1-2-013018

Lab Sample ID: 280-105950-36

Date Collected: 01/30/18 16:21

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			299.7 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 10:26	AGCM	TAL DEN

TestAmerica Denver

Lab Chronicle

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-3624PNEBR-W1-1-013018

Lab Sample ID: 280-105950-37

Matrix: Water

Date Collected: 01/30/18 15:28

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			267 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 10:33	AGCM	TAL DEN

Client Sample ID: FAY-D-3624PNEBR-W1-2-013018D

Lab Sample ID: 280-105950-38

Matrix: Water

Date Collected: 01/30/18 15:45

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			275.3 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 10:36	AGCM	TAL DEN

Client Sample ID: FAY-D-3833HEART-W1-1-013018D

Lab Sample ID: 280-105950-39

Matrix: Water

Date Collected: 01/30/18 16:20

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			277.3 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 10:39	AGCM	TAL DEN

Client Sample ID: FAY-D-3624PNEBR-W1-2-013018

Lab Sample ID: 280-105950-40

Matrix: Water

Date Collected: 01/30/18 15:45

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			280.2 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 10:42	AGCM	TAL DEN

Client Sample ID: Method Blank

Lab Sample ID: MB 280-403988/1-A

Matrix: Water

Date Collected: N/A

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 08:19	AGCM	TAL DEN

Client Sample ID: Method Blank

Lab Sample ID: MB 280-404157/1-A

Matrix: Water

Date Collected: N/A

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 13:44	AGCM	TAL DEN

TestAmerica Denver

Lab Chronicle

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: Method Blank

Lab Sample ID: MB 280-404355/1-A

Matrix: Water

Date Collected: N/A
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 09:21	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: DLCK 280-390728/12

Matrix: Water

Date Collected: N/A
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8321A		1			390728	10/10/17 10:04	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: DLCK 280-404345/13

Matrix: Water

Date Collected: N/A
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8321A		1			404345	02/08/18 13:38	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 280-403988/2-A

Matrix: Water

Date Collected: N/A
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 08:23	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 280-404157/2-A

Matrix: Water

Date Collected: N/A
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 13:47	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 280-404355/2-A

Matrix: Water

Date Collected: N/A
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 09:24	AGCM	TAL DEN

TestAmerica Denver

Lab Chronicle

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 280-403988/3-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 08:26	AGCM	TAL DEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 280-404157/3-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 13:50	AGCM	TAL DEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 280-404355/3-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 09:28	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LLCS 280-403988/4-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	403988	02/06/18 09:31	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404182	02/07/18 08:29	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LLCS 280-404157/4-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 13:54	AGCM	TAL DEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LLCS 280-404355/4-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			250 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 09:31	AGCM	TAL DEN

TestAmerica Denver

Lab Chronicle

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Client Sample ID: FAY-D-170MEDOW-W1-1-013018

Lab Sample ID: 280-105950-14 MS

Date Collected: 01/30/18 09:17

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			252.1 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:13	AGCM	TAL DEN

Client Sample ID: FAY-D-3624PNEBR-W1-2-013018

Lab Sample ID: 280-105950-40 MS

Date Collected: 01/30/18 15:45

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			261.9 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 10:49	AGCM	TAL DEN

Client Sample ID: FAY-D-170MEDOW-W1-1-013018

Lab Sample ID: 280-105950-14 DU

Date Collected: 01/30/18 09:17

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			229.3 mL	5 mL	404157	02/07/18 10:33	HMA	TAL DEN
Total/NA	Analysis	8321A		1			404346	02/08/18 14:10	AGCM	TAL DEN

Client Sample ID: FAY-D-3624PNEBR-W1-2-013018

Lab Sample ID: 280-105950-40 DU

Date Collected: 01/30/18 15:45

Matrix: Water

Date Received: 01/31/18 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			268.5 mL	5 mL	404355	02/08/18 17:57	CDC	TAL DEN
Total/NA	Analysis	8321A		1			404457	02/09/18 10:46	AGCM	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TestAmerica Denver

Accreditation/Certification Summary

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Laboratory: TestAmerica Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
North Carolina (WW/SW)	State Program	4	358	12-31-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8321A	3535	Water	HFPO-DA

TestAmerica Denver

Method Summary

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Method	Method Description	Protocol	Laboratory
8321A	HFPO-DA	SW846	TAL DEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TestAmerica Denver

Sample Summary

Client: Chemours Company FC, LLC The
Project/Site: FAY-2018 Residential Sampling

TestAmerica Job ID: 280-105950-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-105950-1	FAY-D-3516HEART-W1-1-013018	Water	01/30/18 08:25	01/31/18 09:40
280-105950-2	FAY-D-3516HEART-W1-2-013018	Water	01/30/18 08:23	01/31/18 09:40
280-105950-3	FAY-D-3521HEART-W1-1-013018	Water	01/30/18 08:46	01/31/18 09:40
280-105950-4	FAY-D-3521HEART-W1-2-013018	Water	01/30/18 11:33	01/31/18 09:40
280-105950-5	FAY-D-3619HEART-W1-1-013018	Water	01/30/18 09:09	01/31/18 09:40
280-105950-6	FAY-D-3619HEART-W1-2-013018	Water	01/30/18 09:10	01/31/18 09:40
280-105950-7	FAY-D-3615HEART-W1-1-013018	Water	01/30/18 09:34	01/31/18 09:40
280-105950-8	FAY-D-3615HEART-W1-2-013018	Water	01/30/18 09:35	01/31/18 09:40
280-105950-9	FAY-D-3634HEART-W1-1-013018	Water	01/30/18 10:02	01/31/18 09:40
280-105950-10	FAY-D-3634HEART-W1-2-013018	Water	01/30/18 10:03	01/31/18 09:40
280-105950-11	FAY-D-FB-013018	Water	01/30/18 13:00	01/31/18 09:40
280-105950-12	FAY-D-46MEDOW-W1-1-013018	Water	01/30/18 08:30	01/31/18 09:40
280-105950-13	FAY-D-196UPTON-W1-1-013018	Water	01/30/18 08:58	01/31/18 09:40
280-105950-14	FAY-D-170MEDOW-W1-1-013018	Water	01/30/18 09:17	01/31/18 09:40
280-105950-15	FAY-D-170MEDOW-W1-1-013018-D	Water	01/30/18 09:17	01/31/18 09:40
280-105950-16	FAY-D-102UPTON-W1-1-013018	Water	01/30/18 09:52	01/31/18 09:40
280-105950-17	FAY-D-121HILLT-W1-1-013018	Water	01/30/18 10:15	01/31/18 09:40
280-105950-18	FAY-D-99DRYES-W1-1-013018	Water	01/30/18 11:16	01/31/18 09:40
280-105950-19	FAY-D-6110CHKFT-W1-1-013018	Water	01/30/18 11:58	01/31/18 09:40
280-105950-20	FAY-D-6695CHKFT-W1-1-013018	Water	01/30/18 15:20	01/31/18 09:40
280-105950-21	FAY-D-3662HEART-W1-1-013018	Water	01/30/18 10:31	01/31/18 09:40
280-105950-22	FAY-D-3662HEART-W1-2-013018	Water	01/30/18 10:34	01/31/18 09:40
280-105950-23	FAY-D-3655HEART-W1-1-013018	Water	01/30/18 10:55	01/31/18 09:40
280-105950-24	FAY-D-3655HEART-W1-2-013018	Water	01/30/18 10:56	01/31/18 09:40
280-105950-25	FAY-D-3720HEART-W1-1-013018	Water	01/30/18 11:25	01/31/18 09:40
280-105950-26	FAY-D-3720HEART-W2-1-013018	Water	01/30/18 13:36	01/31/18 09:40
280-105950-27	FAY-D-3721HEART-W1-1-013018	Water	01/30/18 13:46	01/31/18 09:40
280-105950-28	FAY-D-3721HEART-W1-2-013018	Water	01/30/18 13:50	01/31/18 09:40
280-105950-29	FAY-D-3745HEART-W1-1-013018	Water	01/30/18 14:08	01/31/18 09:40
280-105950-30	FAY-D-3745HEART-W1-2-013018	Water	01/30/18 14:09	01/31/18 09:40
280-105950-31	FAY-D-3765HEART-W1-1-013018	Water	01/30/18 14:42	01/31/18 09:40
280-105950-32	FAY-D-6676NC87H-W1-1-013018	Water	01/30/18 10:02	01/31/18 09:40
280-105950-33	FAY-D-6740NC87H-W1-1-013018	Water	01/30/18 10:11	01/31/18 09:40
280-105950-34	FAY-D-6740NC87H-W1-2-013018	Water	01/30/18 10:25	01/31/18 09:40
280-105950-35	FAY-D-3833Heart-W1-1-013018	Water	01/30/18 16:20	01/31/18 09:40
280-105950-36	FAY-D-3833Heart-W1-2-013018	Water	01/30/18 16:21	01/31/18 09:40
280-105950-37	FAY-D-3624PNEBR-W1-1-013018	Water	01/30/18 15:28	01/31/18 09:40
280-105950-38	FAY-D-3624PNEBR-W1-2-013018D	Water	01/30/18 15:45	01/31/18 09:40
280-105950-39	FAY-D-3833HEART-W1-1-013018D	Water	01/30/18 16:20	01/31/18 09:40
280-105950-40	FAY-D-3624PNEBR-W1-2-013018	Water	01/30/18 15:45	01/31/18 09:40

TestAmerica Denver

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-105950-1

SDG No.: _____

Instrument ID: LC_LCMS7Analysis Batch Number: 390728Lab Sample ID: STD001 280-390728/3 IC

Client Sample ID: _____

Date Analyzed: 10/10/17 09:35Lab File ID: hfpo717J10026.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	0.89	Baseline	meyera	10/10/17 11:50

8321A

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Instrument ID: LC_LCMS7

Analysis Batch Number: 404182

Lab Sample ID: 280-105950-1

Client Sample ID: FAY-D-3516HEART-W1-1-013018

Date Analyzed: 02/07/18 09:08

Lab File ID: hfpo718B07019.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	0.96	Assign Peak	meyera	02/07/18 11:20

Lab Sample ID: 280-105950-2

Client Sample ID: FAY-D-3516HEART-W1-2-013018

Date Analyzed: 02/07/18 09:11

Lab File ID: hfpo718B07020.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	0.96	Assign Peak	meyera	02/07/18 11:20

Lab Sample ID: 280-105950-4

Client Sample ID: FAY-D-3521HEART-W1-2-013018

Date Analyzed: 02/07/18 09:18

Lab File ID: hfpo718B07022.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	0.92	Assign Peak	meyera	02/07/18 11:21

Lab Sample ID: 280-105950-5

Client Sample ID: FAY-D-3619HEART-W1-1-013018

Date Analyzed: 02/07/18 09:21

Lab File ID: hfpo718B07023.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	0.98	Baseline	meyera	02/07/18 11:21

Lab Sample ID: 280-105950-7

Client Sample ID: FAY-D-3615HEART-W1-1-013018

Date Analyzed: 02/07/18 09:31

Lab File ID: hfpo718B07026.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	1.02	Baseline	meyera	02/07/18 11:21

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Instrument ID: LC_LCMS7

Analysis Batch Number: 404182

Lab Sample ID: 280-105950-9

Client Sample ID: FAY-D-3634HEART-W1-1-013018

Date Analyzed: 02/07/18 09:38

Lab File ID: hfpo718B07028.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	0.96	Assign Peak	meyera	02/07/18 11:21

Lab Sample ID: 280-105950-10

Client Sample ID: FAY-D-3634HEART-W1-2-013018

Date Analyzed: 02/07/18 09:41

Lab File ID: hfpo718B07029.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	0.96	Assign Peak	meyera	02/07/18 11:22

Lab Sample ID: 280-105950-11

Client Sample ID: FAY-D-FB-013018

Date Analyzed: 02/07/18 09:44

Lab File ID: hfpo718B07030.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA		Invalid Compound ID	meyera	02/07/18 11:22

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Instrument ID: LC_LCMS7

Analysis Batch Number: 404345

Lab Sample ID: STD001 280-404345/3 IC

Client Sample ID: _____

Date Analyzed: 02/08/18 13:05

Lab File ID: hfpo718B08034.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	1.06	Assign Peak	meyera	02/08/18 15:19

Lab Sample ID: STD002 280-404345/4 IC

Client Sample ID: _____

Date Analyzed: 02/08/18 13:08

Lab File ID: hfpo718B08035.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	1.06	Baseline	meyera	02/08/18 15:19

Lab Sample ID: DLCK 280-404345/13

Client Sample ID: _____

Date Analyzed: 02/08/18 13:38

Lab File ID: hfpo718B08044.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	1.06	Baseline	meyera	02/08/18 15:20

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-105950-1

SDG No.: _____

Instrument ID: LC_LCMS7Analysis Batch Number: 404346Lab Sample ID: 280-105950-23Client Sample ID: FAY-D-3655HEART-W1-1-013018Date Analyzed: 02/08/18 14:46Lab File ID: hfpo718B08065.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	0.99	Assign Peak	meyera	02/08/18 15:23

Lab Sample ID: 280-105950-24Client Sample ID: FAY-D-3655HEART-W1-2-013018Date Analyzed: 02/08/18 14:49Lab File ID: hfpo718B08066.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	0.99	Assign Peak	meyera	02/08/18 15:23

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica DenverJob No.: 280-105950-1

SDG No.: _____

Instrument ID: LC_LCMS7Analysis Batch Number: 404457Lab Sample ID: 280-105950-33Client Sample ID: FAY-D-6740NC87H-W1-1-013018Date Analyzed: 02/09/18 10:16Lab File ID: hfpo718B09031.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	0.92	Baseline	meyera	02/09/18 12:00

Lab Sample ID: 280-105950-34Client Sample ID: FAY-D-6740NC87H-W1-2-013018Date Analyzed: 02/09/18 10:20Lab File ID: hfpo718B09032.d GC Column: Synergi Hydro ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HFPO-DA	0.92	Baseline	meyera	02/09/18 12:00

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
HFPO I.S._00007	12/12/18	12/12/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00007	1 mL	13C3 HFPO-DA	0.5 ug/mL	
.13C3 HFPO-DA_00007	08/17/20	Wellington Laboratories, Lot M3HFPOADA0817		(Purchased Reagent)	13C3 HFPO-DA	50 ug/mL	13C3 HFPO-DA (IS)	0.5 ug/mL	
							13C3 HFPO-DA (IS)	50 ug/mL	
HFPO I.S._00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	13C3 HFPO-DA	0.5 ug/mL	
.13C3 HFPO-DA_00008	01/30/19	Wellington Laboratories, Lot M3HFPOADA0817		(Purchased Reagent)	13C3 HFPO-DA	50 ug/mL	13C3 HFPO-DA (IS)	0.5 ug/mL	
							13C3 HFPO-DA (IS)	50 ug/mL	
HFPO Spike_00004	10/30/18	10/30/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00004	1 mL	HFPO-DA	0.5 ug/mL	
.HFPO-DA_00004	07/13/20	Wellington Laboratories, Lot HFPODA0717		(Purchased Reagent)	HFPO-DA		50 ug/mL		
HFPO_CAL-0_00031	10/24/17	10/10/17	PFC Dill_Solvent, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L	
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL	
..13C3 HFPO-DA_00004	08/28/18	Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)	13C3 HFPO-DA		50 ug/mL		
HFPO_CAL-0_00032	02/22/18	02/08/18	PFC Dill_Solvent, Lot 00016	1 mL	HFPO I.S._00008	20 uL	13C3 HFPO-DA	10 ug/L	
.HFPO I.S._00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	13C3 HFPO-DA	0.5 ug/mL	
..13C3 HFPO-DA_00008	01/30/19	Wellington Laboratories, Lot M3HFPOADA0817		(Purchased Reagent)	13C3 HFPO-DA		50 ug/mL		
HFPO_CAL-1_00030	09/28/17	09/14/17	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L	
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO Spike_00003	0.5 uL	13C3 HFPO-DA (IS)	10 ug/L	
					HFPO-DA		0.25 ug/L		
..13C3 HFPO-DA_00004	08/28/18	Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)	13C3 HFPO-DA	0.5 ug/mL	13C3 HFPO-DA (IS)	0.5 ug/mL	
.HFPO Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00003	1 mL			
..HFPO-DA_00003	12/16/18	Wellington Laboratories, Lot HFPODA0213		(Purchased Reagent)	HFPO-DA		50 ug/mL		
HFPO_CAL-1_00031	10/24/17	10/10/17	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	0.5 ug/mL	
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO Spike_00003	0.5 uL	13C3 HFPO-DA (IS)	0.25 ug/L	
					HFPO-DA		0.5 ug/mL		
..13C3 HFPO-DA_00004	08/28/18	Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)	13C3 HFPO-DA	0.5 ug/mL	13C3 HFPO-DA (IS)	0.5 ug/mL	
.HFPO-DA_00003	12/16/18	Wellington Laboratories, Lot HFPODA0213		(Purchased Reagent)			50 ug/mL		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration		
					Reagent ID	Volume Added				
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL		
.HFPO Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00003	1 mL	HFPO-DA	0.5 ug/mL		
..HFPO-DA_00003	12/16/18		Wellington Laboratories, Lot HFPOADA0213		(Purchased Reagent)		HFPO-DA	50 ug/mL		
HFPO_CAL-1_00032	02/22/18	02/08/18	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00008	20 uL	13C3 HFPO-DA	10 ug/L		
					HFPO Spike_00004	0.5 uL	13C3 HFPO-DA (IS)	10 ug/L		
.HFPO I.S._00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	HFPO-DA	0.25 ug/L		
							13C3 HFPO-DA (IS)	0.5 ug/mL		
..13C3 HFPO-DA_00008	01/30/19		Wellington Laboratories, Lot M3HFPOADA0817		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL		
							13C3 HFPO-DA (IS)	50 ug/mL		
.HFPO Spike_00004	10/30/18	10/30/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00004	1 mL	HFPO-DA	0.5 ug/mL		
..HFPO-DA_00004	07/13/20		Wellington Laboratories, Lot HFPOADA0717		(Purchased Reagent)		HFPO-DA	50 ug/mL		
HFPO_CAL-2_00031	09/28/17	09/14/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L		
					HFPO Spike_00003	1 uL	13C3 HFPO-DA (IS)	10 ug/L		
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	HFPO-DA	0.5 ug/mL		
							13C3 HFPO-DA (IS)	0.5 ug/mL		
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL		
							13C3 HFPO-DA (IS)	50 ug/mL		
.HFPO Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00003	1 mL	HFPO-DA	0.5 ug/mL		
..HFPO-DA_00003	12/16/18		Wellington Laboratories, Lot HFPOADA0213		(Purchased Reagent)		HFPO-DA	50 ug/mL		
HFPO_CAL-2_00032	10/24/17	10/10/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L		
					HFPO Spike_00003	1 uL	13C3 HFPO-DA (IS)	10 ug/L		
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	HFPO-DA	0.5 ug/mL		
							13C3 HFPO-DA (IS)	0.5 ug/mL		
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL		
							13C3 HFPO-DA (IS)	50 ug/mL		
.HFPO Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00003	1 mL	HFPO-DA	0.5 ug/mL		
..HFPO-DA_00003	12/16/18		Wellington Laboratories, Lot HFPOADA0213		(Purchased Reagent)		HFPO-DA	50 ug/mL		
HFPO_CAL-2_00033	02/22/18	02/08/18	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00008	20 uL	13C3 HFPO-DA	10 ug/L		
							13C3 HFPO-DA (IS)	10 ug/L		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.HFPO I.S._00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO Spike_00004	1 uL	HFPO-DA	0.5 ug/L
.13C3 HFPO-DA_00008	01/30/19	Wellington Laboratories, Lot M3HFPOADA0817			13C3 HFPO-DA_00008	1 mL	13C3 HFPO-DA	0.5 ug/mL
.HFPO Spike_00004	10/30/18	10/30/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00004	1 mL	13C3 HFPO-DA (IS)	0.5 ug/mL
.HFPO-DA_00004	07/13/20	Wellington Laboratories, Lot HFPOADA0717			(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
HFPO_CAL-3_00030	09/28/17	09/14/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	HFPO-DA	10 ug/L
					HFPO Spike_00003	2 uL	13C3 HFPO-DA (IS)	10 ug/L
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	HFPO-DA	1 ug/L
.13C3 HFPO-DA_00004	08/28/18	Wellington Laboratories, Lot M3HFPOADA0616			(Purchased Reagent)		13C3 HFPO-DA	0.5 ug/mL
.HFPO Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00003	1 mL	13C3 HFPO-DA (IS)	50 ug/mL
.HFPO-DA_00003	12/16/18	Wellington Laboratories, Lot HFPOADA0213			(Purchased Reagent)		HFPO-DA	0.5 ug/mL
HFPO_CAL-3_00031	10/24/17	10/10/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	HFPO-DA	10 ug/L
					HFPO Spike_00003	2 uL	13C3 HFPO-DA (IS)	10 ug/L
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	HFPO-DA	1 ug/L
.13C3 HFPO-DA_00004	08/28/18	Wellington Laboratories, Lot M3HFPOADA0616			(Purchased Reagent)		13C3 HFPO-DA	0.5 ug/mL
.HFPO Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00003	1 mL	13C3 HFPO-DA (IS)	50 ug/mL
.HFPO-DA_00003	12/16/18	Wellington Laboratories, Lot HFPOADA0213			(Purchased Reagent)		HFPO-DA	0.5 ug/mL
HFPO_CAL-3_00032	02/22/18	02/08/18	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00008	20 uL	HFPO-DA	10 ug/L
					HFPO Spike_00004	2 uL	13C3 HFPO-DA (IS)	10 ug/L
.HFPO I.S._00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	HFPO-DA	1 ug/L
.13C3 HFPO-DA_00008	01/30/19	Wellington Laboratories, Lot M3HFPOADA0817			(Purchased Reagent)		13C3 HFPO-DA (IS)	0.5 ug/mL
.HFPO Spike_00004	10/30/18	10/30/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00004	1 mL	13C3 HFPO-DA	50 ug/mL
.HFPO-DA_00004	07/13/20	Wellington Laboratories, Lot HFPOADA0717			(Purchased Reagent)		HFPO-DA	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
HFPO_CAL-4_00030	09/28/17	09/14/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO Spike_00003	4 uL	13C3 HFPO-DA (IS)	10 ug/L
					HFPO-DA		HFPO-DA	2 ug/L
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA (IS)	0.5 ug/mL
..HFPO-DA_00003	12/16/18		Wellington Laboratories, Lot HFPOADA0213		(Purchased Reagent)		HFPO-DA	50 ug/mL
HFPO_CAL-4_00031	10/24/17	10/10/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO Spike_00003	4 uL	13C3 HFPO-DA (IS)	10 ug/L
					HFPO-DA		HFPO-DA	2 ug/L
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA (IS)	0.5 ug/mL
.HFPO Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00003	1 mL	HFPO-DA	0.5 ug/mL
..HFPO-DA_00003	12/16/18		Wellington Laboratories, Lot HFPOADA0213		(Purchased Reagent)		HFPO-DA	50 ug/mL
HFPO_CAL-4_00032	02/22/18	02/08/18	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00008	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO Spike_00004	4 uL	13C3 HFPO-DA (IS)	10 ug/L
					HFPO-DA		HFPO-DA	2 ug/L
.HFPO I.S._00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	13C3 HFPO-DA	0.5 ug/mL
..13C3 HFPO-DA_00008	01/30/19		Wellington Laboratories, Lot M3HFPOADA0817		(Purchased Reagent)		13C3 HFPO-DA (IS)	0.5 ug/mL
.HFPO Spike_00004	10/30/18	10/30/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00004	1 mL	HFPO-DA	0.5 ug/mL
..HFPO-DA_00004	07/13/20		Wellington Laboratories, Lot HFPOADA0717		(Purchased Reagent)		HFPO-DA	50 ug/mL
HFPO_CAL-5_00067	09/28/17	09/14/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO Spike_00003	10 uL	13C3 HFPO-DA (IS)	10 ug/L
					HFPO-DA		HFPO-DA	5 ug/L
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							13C3 HFPO-DA (IS)	50 ug/mL
.HFPO_Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00003	1 mL	HFPO-DA	0.5 ug/mL
..HFPO-DA_00003	12/16/18		Wellington Laboratories, Lot HFPOADA0213		(Purchased Reagent)		HFPO-DA	50 ug/mL
HFPO_CAL-5_00070	10/24/17	10/10/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO_Spike_00003	10 uL	13C3 HFPO-DA (IS)	10 ug/L
.HFPO_I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	HFPO-DA	5 ug/L
							13C3 HFPO-DA	0.5 ug/mL
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA (IS)	0.5 ug/mL
							13C3 HFPO-DA	50 ug/mL
.HFPO_Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00003	1 mL	HFPO-DA	0.5 ug/mL
							HFPO-DA	50 ug/mL
HFPO_CAL-5_00079	02/09/18	01/26/18	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO_Spike_00004	10 uL	HFPO-DA	5 ug/L
.HFPO_I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	50 ug/mL
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		HFPO-DA	0.5 ug/mL
							HFPO-DA	50 ug/mL
.HFPO_Spike_00004	10/30/18	10/30/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00004	1 mL	HFPO-DA	0.5 ug/mL
							HFPO-DA	50 ug/mL
..HFPO-DA_00004	07/13/20		Wellington Laboratories, Lot HFPOADA0717		(Purchased Reagent)		HFPO-DA	50 ug/mL
							HFPO-DA	50 ug/mL
HFPO_CAL-5_00080	02/22/18	02/08/18	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00008	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO_Spike_00004	10 uL	13C3 HFPO-DA (IS)	10 ug/L
.HFPO_I.S._00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	HFPO-DA	5 ug/L
							13C3 HFPO-DA	0.5 ug/mL
..13C3 HFPO-DA_00008	01/30/19		Wellington Laboratories, Lot M3HFPOADA0817		(Purchased Reagent)		13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	50 ug/mL
.HFPO_Spike_00004	10/30/18	10/30/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00004	1 mL	HFPO-DA	0.5 ug/mL
							HFPO-DA	50 ug/mL
..HFPO-DA_00004	07/13/20		Wellington Laboratories, Lot HFPOADA0717		(Purchased Reagent)		HFPO-DA	50 ug/mL
							HFPO-DA	50 ug/mL
HFPO_CAL-6_00067	09/28/17	09/14/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO_Spike_00003	20 uL	13C3 HFPO-DA (IS)	10 ug/L
.HFPO_I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	HFPO-DA	10 ug/L
							13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.HFPO Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00003	1 mL	HFPO-DA	0.5 ug/mL
..HFPO-DA_00003	12/16/18		Wellington Laboratories, Lot HFPOADA0213		(Purchased Reagent)		HFPO-DA	50 ug/mL
HFPO_CAL-6_00070	10/24/17	10/10/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO Spike_00003	20 uL	13C3 HFPO-DA (IS) HFPO-DA	10 ug/L 10 ug/L
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.HFPO Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00003	1 mL	HFPO-DA	0.5 ug/mL
..HFPO-DA_00003	12/16/18		Wellington Laboratories, Lot HFPOADA0213		(Purchased Reagent)		HFPO-DA	50 ug/mL
HFPO_CAL-6_00079	02/09/18	01/26/18	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO Spike_00004	20 uL	HFPO-DA	10 ug/L
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.HFPO Spike_00004	10/30/18	10/30/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00004	1 mL	HFPO-DA	0.5 ug/mL
..HFPO-DA_00004	07/13/20		Wellington Laboratories, Lot HFPOADA0717		(Purchased Reagent)		HFPO-DA	50 ug/mL
HFPO_CAL-6_00080	02/22/18	02/08/18	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00008	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO Spike_00004	20 uL	13C3 HFPO-DA (IS) HFPO-DA	10 ug/L 10 ug/L
.HFPO I.S._00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	13C3 HFPO-DA	0.5 ug/mL
							13C3 HFPO-DA (IS)	0.5 ug/mL
..13C3 HFPO-DA_00008	01/30/19		Wellington Laboratories, Lot M3HFPOADA0817		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.HFPO Spike_00004	10/30/18	10/30/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00004	1 mL	HFPO-DA	0.5 ug/mL
..HFPO-DA_00004	07/13/20		Wellington Laboratories, Lot HFPOADA0717		(Purchased Reagent)		HFPO-DA	50 ug/mL
HFPO_CAL-7_00030	09/28/17	09/14/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO Spike_00003	50 uL	13C3 HFPO-DA (IS) HFPO-DA	10 ug/L 25 ug/L
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA (IS)	0.5 ug/mL
.HFPO Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS MeOH 00110	100 mL	HFPO-DA_00003	1 mL	13C3 HFPO-DA	50 ug/mL
..HFPO-DA_00003	12/16/18		Wellington Laboratories, Lot HFPOADA0213		(Purchased Reagent)		HFPO-DA	50 ug/mL
HFPO_CAL-7_00031	10/24/17	10/10/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO Spike_00003	50 uL	13C3 HFPO-DA (IS)	10 ug/L
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	HFPO-DA	25 ug/L
							13C3 HFPO-DA	0.5 ug/mL
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA (IS)	0.5 ug/mL
.HFPO Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS MeOH_00110	100 mL	HFPO-DA_00003	1 mL	13C3 HFPO-DA	50 ug/mL
..HFPO-DA_00003	12/16/18		Wellington Laboratories, Lot HFPOADA0213		(Purchased Reagent)		HFPO-DA	50 ug/mL
HFPO_CAL-7_00032	02/22/18	02/08/18	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00008	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO Spike_00004	50 uL	13C3 HFPO-DA (IS)	10 ug/L
.HFPO I.S._00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	HFPO-DA	25 ug/L
							13C3 HFPO-DA	0.5 ug/mL
..13C3 HFPO-DA_00008	01/30/19		Wellington Laboratories, Lot M3HFPOADA0817		(Purchased Reagent)		13C3 HFPO-DA (IS)	0.5 ug/mL
.HFPO Spike_00004	10/30/18	10/30/17	LCMS Grade MeOH, Lot LCMS MeOH_00110	100 mL	HFPO-DA_00004	1 mL	HFPO-DA	50 ug/mL
..HFPO-DA_00004	07/13/20		Wellington Laboratories, Lot HFPOADA0717		(Purchased Reagent)		HFPO-DA	50 ug/mL
HFPO_CAL-8_00030	09/28/17	09/14/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO Spike_00003	100 uL	13C3 HFPO-DA (IS)	10 ug/L
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	HFPO-DA	50 ug/L
							13C3 HFPO-DA	0.5 ug/mL
..13C3 HFPO-DA_00004	08/28/18		Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA (IS)	0.5 ug/mL
.HFPO Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS MeOH_00110	100 mL	HFPO-DA_00003	1 mL	HFPO-DA	50 ug/mL
..HFPO-DA_00003	12/16/18		Wellington Laboratories, Lot HFPOADA0213		(Purchased Reagent)		HFPO-DA	50 ug/mL
HFPO_CAL-8_00031	10/24/17	10/10/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration			
					Reagent ID	Volume Added					
.HFPO_I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA (IS)	10 ug/L			
							HFPO-DA	50 ug/L			
..13C3 HFPO-DA_00004	08/28/18	Wellington Laboratories, Lot M3HFPOADA0616			(Purchased Reagent)		13C3 HFPO-DA	0.5 ug/mL			
							13C3 HFPO-DA (IS)	0.5 ug/mL			
.HFPO_Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00003	1 mL	HFPO-DA	50 ug/mL			
..HFPO-DA_00003	12/16/18	Wellington Laboratories, Lot HFPOADA0213			(Purchased Reagent)		HFPO-DA	0.5 ug/mL			
HFPO_CAL-8_00032	02/22/18	02/08/18	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO_I.S._00008	20 uL	13C3 HFPO-DA	10 ug/L			
							13C3 HFPO-DA (IS)	10 ug/L			
.HFPO_I.S._00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	HFPO-DA	50 ug/L			
							13C3 HFPO-DA	0.5 ug/mL			
..13C3 HFPO-DA_00008	01/30/19	Wellington Laboratories, Lot M3HFPOADA0817			(Purchased Reagent)		13C3 HFPO-DA (IS)	0.5 ug/mL			
							13C3 HFPO-DA	50 ug/mL			
.HFPO_Spike_00004	10/30/18	10/30/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00004	1 mL	HFPO-DA	0.5 ug/mL			
..HFPO-DA_00004	07/13/20	Wellington Laboratories, Lot HFPOADA0717			(Purchased Reagent)		HFPO-DA	50 ug/mL			
HFPO_CAL-9_00001	02/22/18	02/08/18	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO_I.S._00008	20 uL	13C3 HFPO-DA	10 ug/L			
							13C3 HFPO-DA (IS)	10 ug/L			
.HFPO_I.S._00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00008	1 mL	HFPO-DA	100 ug/L			
							13C3 HFPO-DA	0.5 ug/mL			
..13C3 HFPO-DA_00008	01/30/19	Wellington Laboratories, Lot M3HFPOADA0817			(Purchased Reagent)		13C3 HFPO-DA (IS)	0.5 ug/mL			
							13C3 HFPO-DA	50 ug/mL			
.HFPO_Spike_00004	10/30/18	10/30/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00004	1 mL	HFPO-DA	0.5 ug/mL			
..HFPO-DA_00004	07/13/20	Wellington Laboratories, Lot HFPOADA0717			(Purchased Reagent)		HFPO-DA	50 ug/mL			
HFPO_ICV_00031	09/28/17	09/14/17	80:20 Methanol : H2O, Lot 00016	1 mL	HFPO_I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L			
							HFPO-Spike_00003	2 ug/L			
.HFPO_I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL			
..13C3 HFPO-DA_00004	08/28/18	Wellington Laboratories, Lot M3HFPOADA0616			(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL			
.HFPO_Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS_MeOH_00110	100 mL	HFPO-DA_00003	1 mL	HFPO-DA	0.5 ug/mL			
..HFPO-DA_00003	12/16/18	Wellington Laboratories, Lot HFPOADA0213			(Purchased Reagent)		HFPO-DA	50 ug/mL			

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
HFPO_ICV_00032	10/24/17	10/10/17	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00004	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO Spike 00003	4 uL		
.HFPO I.S._00004	08/28/18	08/28/17	LCMS Grade MeOH, Lot LCMS MeOH 00110	100 mL	13C3 HFPO-DA_00004	1 mL	13C3 HFPO-DA	0.5 ug/mL
..13C3 HFPO-DA_00004	08/28/18	Wellington Laboratories, Lot M3HFPOADA0616		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL	
.HFPO Spike_00003	01/11/18	01/10/17	LCMS Grade MeOH, Lot LCMS MeOH 00110	100 mL	HFPO-DA_00003	1 mL	HFPO-DA	0.5 ug/mL
..HFPO-DA_00003	12/16/18	Wellington Laboratories, Lot HFPOADA0213		(Purchased Reagent)		HFPO-DA	50 ug/mL	
HFPO_ICV_00034	02/22/18	02/08/18	80:20 Methanol : H ₂ O, Lot 00016	1 mL	HFPO I.S._00008	20 uL	13C3 HFPO-DA	10 ug/L
					HFPO ICV_00001	10 uL		
.HFPO I.S._00008	12/12/18	01/30/18	LCMS Grade MeOH, Lot LCMS MeOH 00110	100 mL	13C3 HFPO-DA_00008	1 mL	13C3 HFPO-DA	0.5 ug/mL
..13C3 HFPO-DA_00008	01/30/19	Wellington Laboratories, Lot M3HFPOADA0817		(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL	
.HFPO ICV_00001	11/03/18	11/03/17	Methanol, Lot 12345	100 mL	HFPO SS stock_00002	20 uL	HFPO-DA	0.195009 ug/mL
..HFPO SS stock_00002	11/03/18	11/03/17	Methanol, Lot 12345	500 mL	HFPO SS_00003	0.5026 g	HFPO-DA	975.044 ug/mL
...HFPO SS_00003	05/23/21	Synquest Laboratories, Lot Q141-128		(Purchased Reagent)		HFPO-DA	97 %	

Reagent

13C3 HFPO-DA_00004



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CERTIFICATE OF ANALYSIS DOCUMENTATION

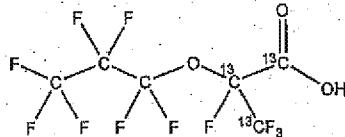
PRODUCT CODE: M3HFPO-DA

LOT NUMBER: M3HFPODA0616

COMPOUND: 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-¹³C₃-propanoic acid

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₃¹²C₃HF₁₁O₃

MOLECULAR WEIGHT: 333.03

CONCENTRATION: 50 ± 2.5 µg/ml

SOLVENT(S): Methanol

CHEMICAL PURITY: >98%

ISOTOPIC PURITY: >99% ¹³C

LAST TESTED: (mm/dd/yyyy) 06/25/2016

(¹³C₃)

EXPIRY DATE: (mm/dd/yyyy) 06/25/2019

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 1.5% of two constitutional isomers.
- Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 06/29/2016

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

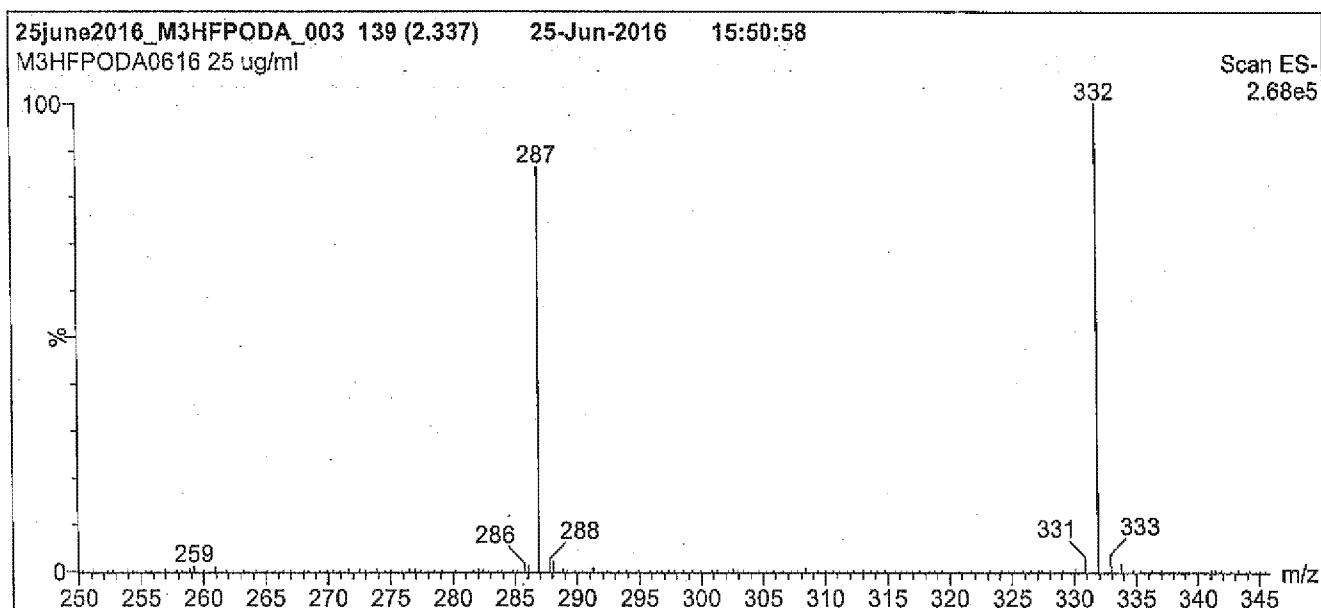
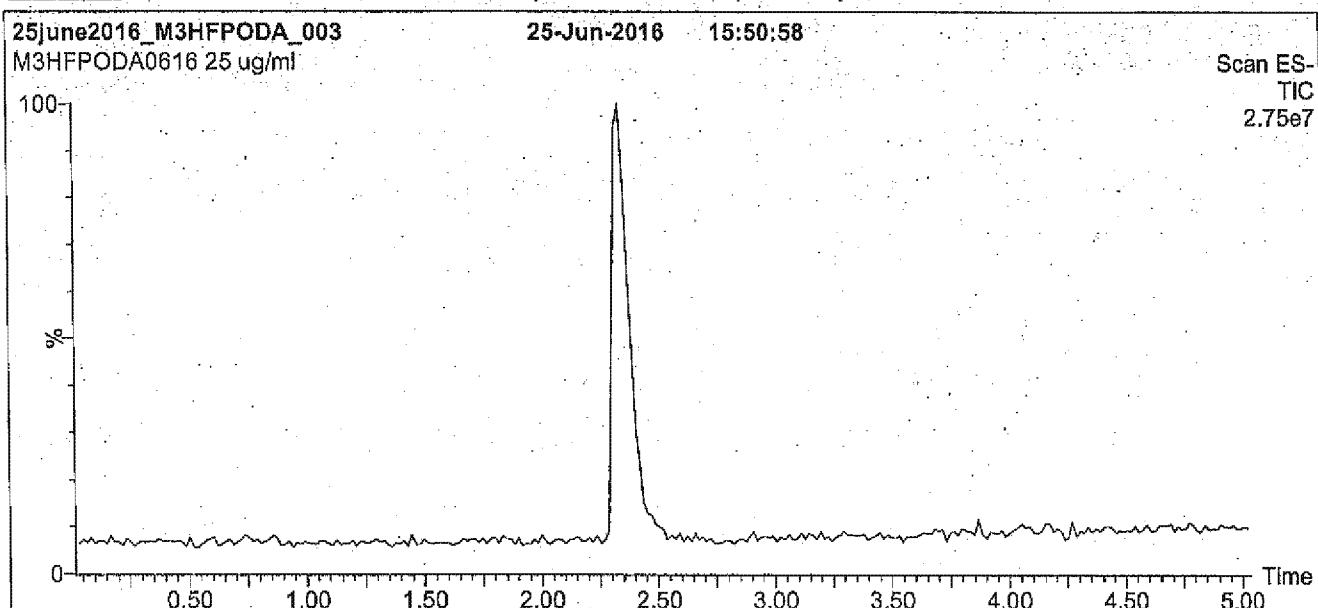
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: M3HFPO-DA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈,
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

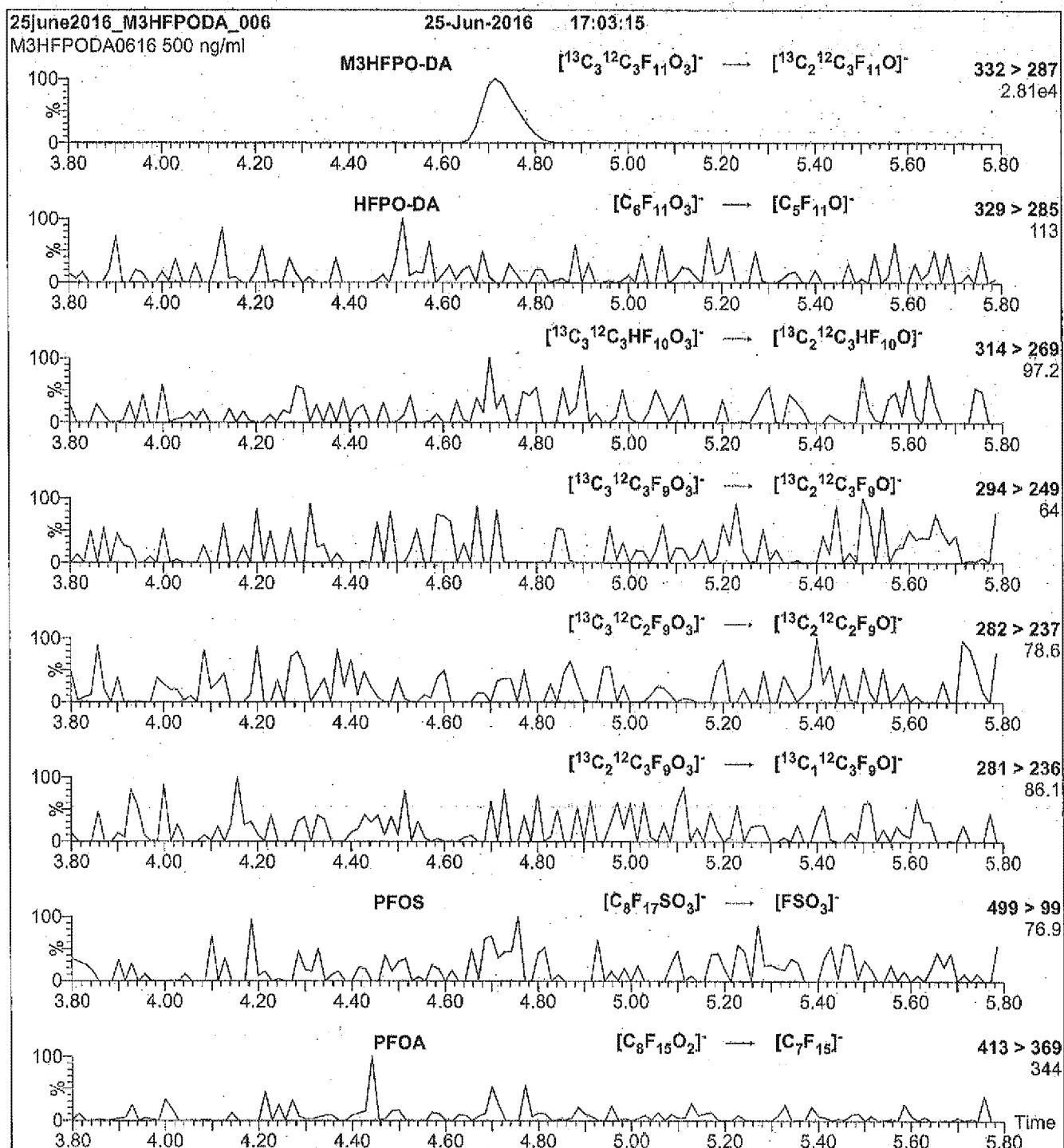
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 9.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: M3HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml M3HFPO-DA)

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 5

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

Reagent

13C3 HFPO-DA_00007



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

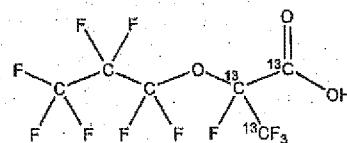
PRODUCT CODE:

M3HFPO-DA

COMPOUND:

2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3-heptafluoropropoxy)-¹³C₃-propanoic acid

STRUCTURE:



LOT NUMBER: M3HFPODA0817

CAS #:

Not available

MOLECULAR FORMULA:

¹³C₃¹²C₃HF₁₁O₃

CONCENTRATION:

50 ± 2.5 µg/ml

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

08/17/2017

EXPIRY DATE: (mm/dd/yyyy)

08/17/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 333.03

SOLVENT(S): Methanol

ISOTOPIC PURITY: >99% ¹³C

(¹³C₃)

DOCUMENTATION/DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 1.5% of two constitutional isomers.
- Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim, General Manager

Date: 08/25/2017

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • Info@well-labs.com

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UW/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

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x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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EXPIRY DATE / PERIOD OF VALIDITY:

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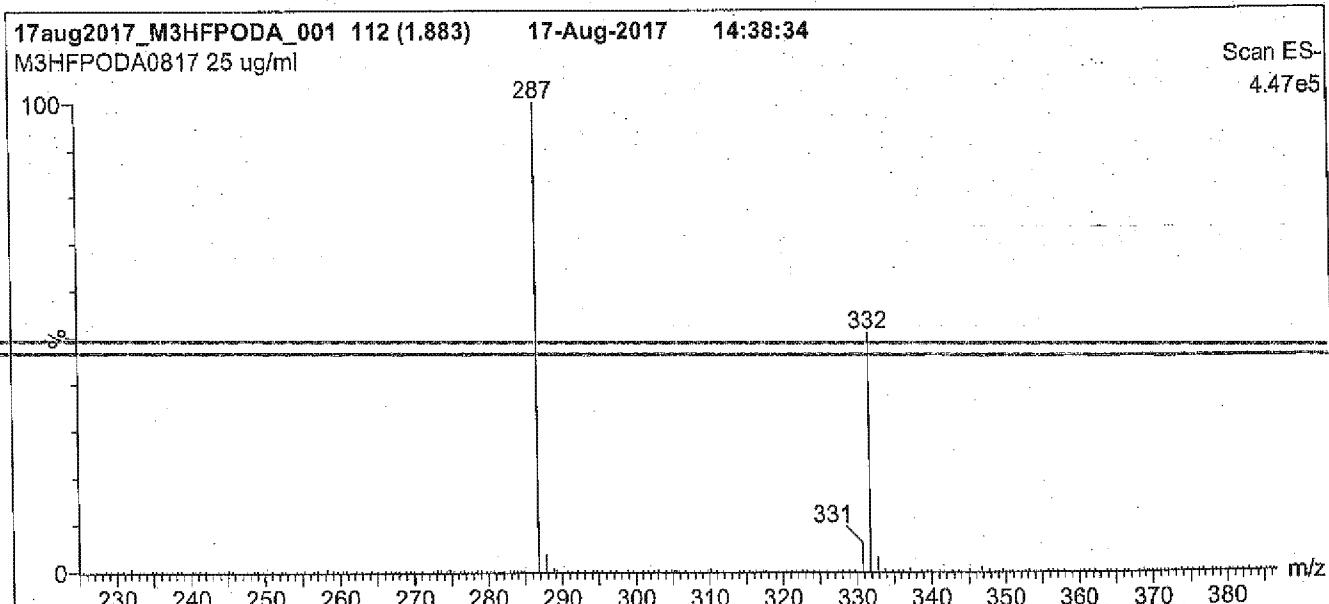
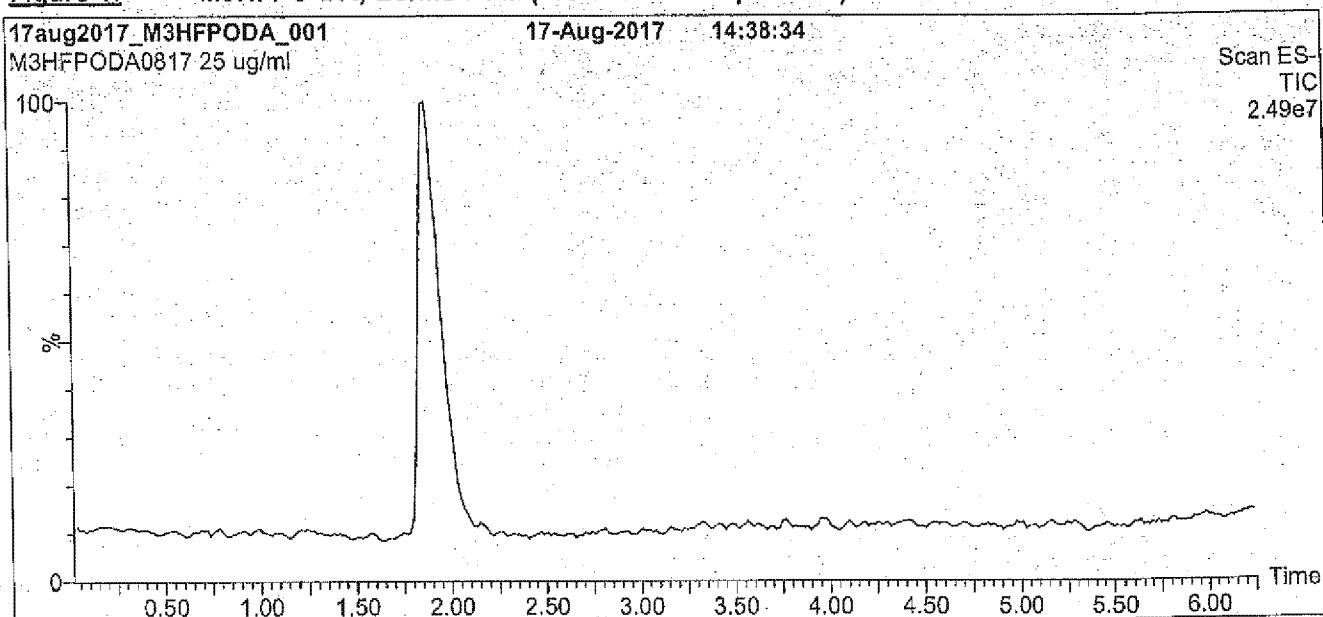
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Figure 1: M3HFPO-DA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μm, 2.1 x 100 mm

Mobile phase: Gradient

Start: 55% MeOH / 45% H₂O with 10 mM NH₄OAc buffer
 Ramp to 90% organic over 7.5 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.

Time: 10 min

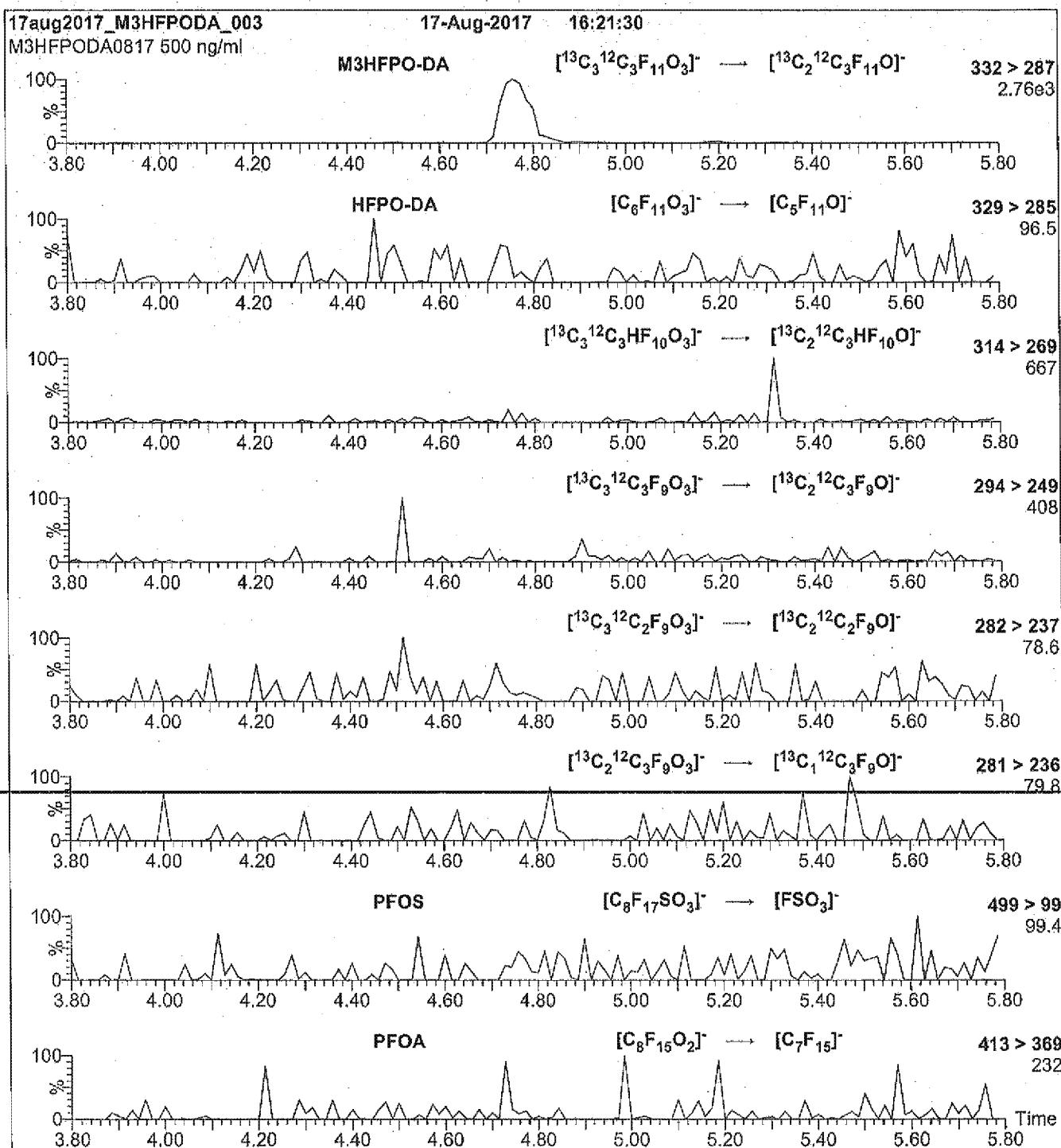
Flow: 300 μl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = 10.00
 Cone Gas Flow (l/hr) = 100
 Desolvation Gas Flow (l/hr) = 750

Figure 2: M3HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml M3HFPO-DA)

MS Parameters

Collision Gas (mbar) = 3.24e-3
Collision Energy (eV) = 5

Mobile phase: Isocratic 80% MeOH / 20% H₂O wth 10 mM NH₄OAc buffer

Flow: 300 μ l/min

Reagent

13C3 HFPO-DA_00008



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

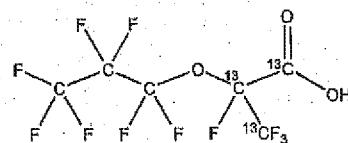
PRODUCT CODE:

M3HFPO-DA

COMPOUND:

2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3-heptafluoropropoxy)-¹³C₃-propanoic acid

STRUCTURE:



LOT NUMBER: M3HFPODA0817

CAS #:

Not available

MOLECULAR FORMULA:

¹³C₃¹²C₃HF₁₁O₃

CONCENTRATION:

50 ± 2.5 µg/ml

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

08/17/2017

EXPIRY DATE: (mm/dd/yyyy)

08/17/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 333.03

SOLVENT(S): Methanol

ISOTOPIC PURITY: >99% ¹³C

(¹³C₃)

DOCUMENTATION/DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 1.5% of two constitutional isomers.
- Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim, General Manager

Date: 08/25/2017

(mm/dd/yyyy)

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The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

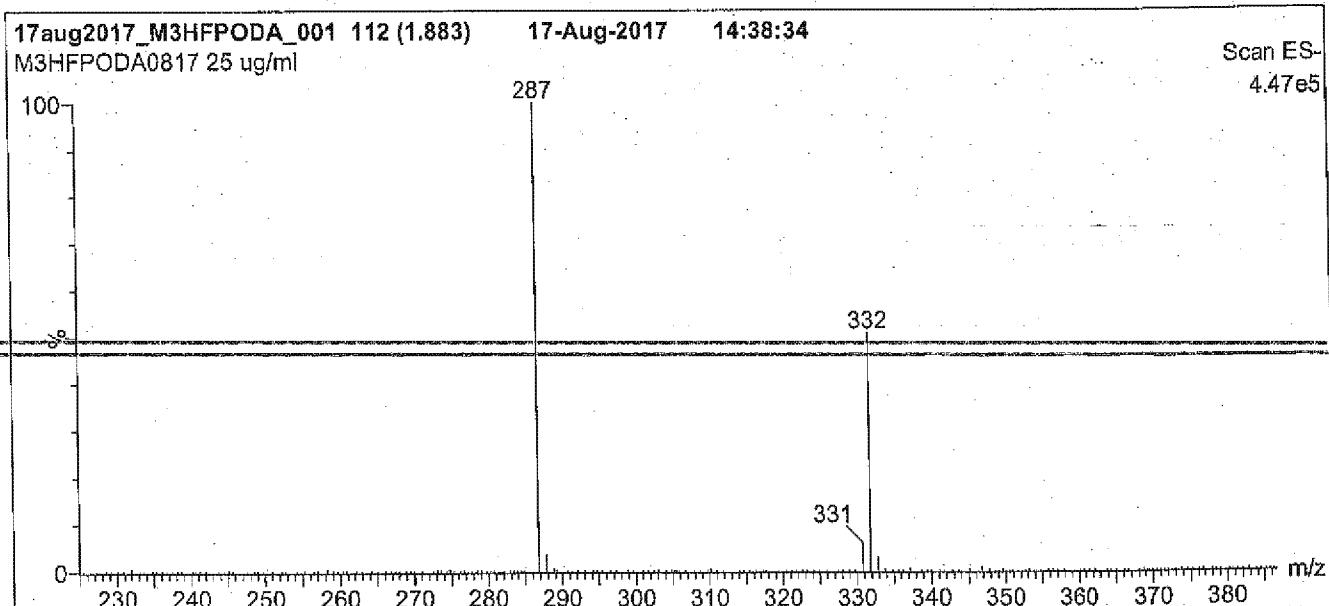
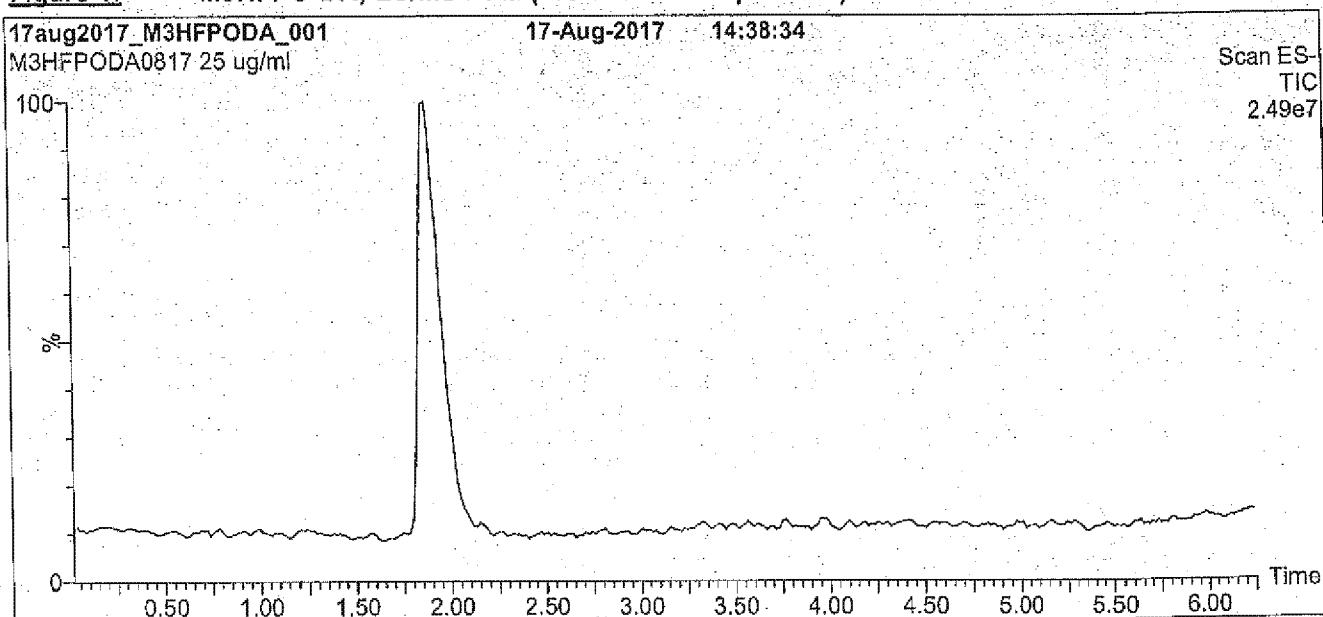
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: M3HFPO-DA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μm, 2.1 x 100 mm

Mobile phase: Gradient

Start: 55% MeOH / 45% H₂O with 10 mM NH₄OAc buffer
 Ramp to 90% organic over 7.5 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.

Time: 10 min

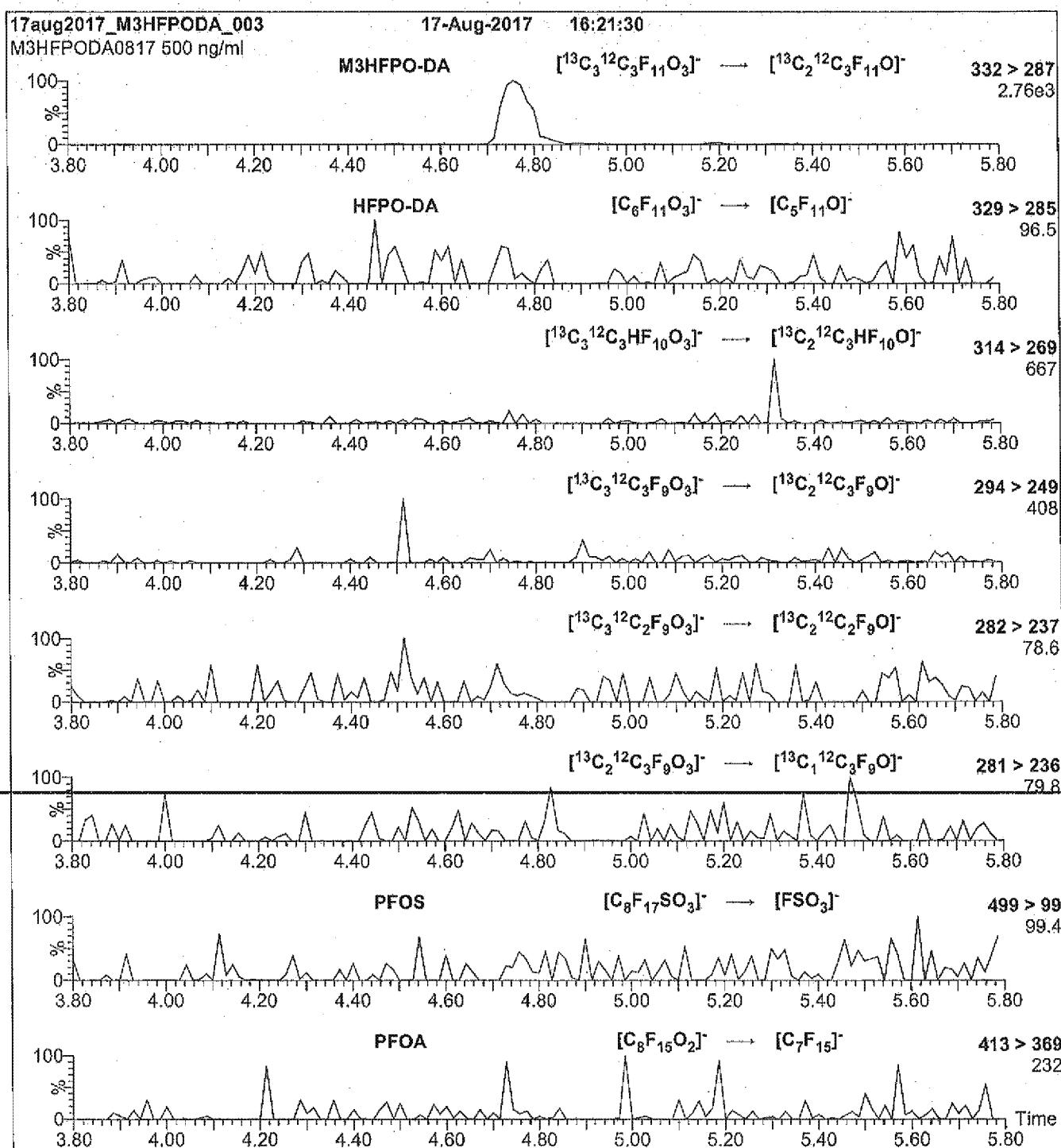
Flow: 300 μl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = 10.00
 Cone Gas Flow (l/hr) = 100
 Desolvation Gas Flow (l/hr) = 750

Figure 2: M3HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml M3HFPO-DA)

MS Parameters

Collision Gas (mbar) = 3.24e-3
Collision Energy (eV) = 5

Mobile phase: Isocratic 80% MeOH / 20% H₂O wth 10 mM NH₄OAc buffer

Flow: 300 μ l/min

Reagent

HFPO I.S._00004

**Reagent ID: HFPO I.S._00004**

Description:	Internal Standard for HFPO 0.5ug/ml	Expiration Date:	08/28/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	North Analytical	Prepared By:	Meyer, Andrew GC
Reagent Volume:	100.000 mL	Solvent:	LCMS Grade MeOH
Creation Date:	08/28/2017	Solvent Lot#:	LCMS_MeOH_00110
Open Date:			
Container(s):	4700620		
Comment:			

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	13C3 HFPO-DA_00004	08/28/2018	50.00000	ug/mL	0.50000	ug/mL
13C3 HFPO-DA (IS)	13C3 HFPO-DA_00004	08/28/2018	50.00000	ug/mL	0.50000	ug/mL

Source Recipients

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
13C3 HFPO-DA_00004	13C3 HFPO-DA I.S. for HFPO	ASTD	08/28/18	Wellington Laboratories	M3HFPOADA0616M3HFPO-DA	1.00000	mL	

Ok PW
8/29/17

ataset: Untitled

st Altered: Tuesday, August 29, 2017 10:47:21 Mountain Daylight Time

nted: Tuesday, August 29, 2017 10:47:53 Mountain Daylight Time

ethod: C:\MassLynx\8321.PRO\MethDB\hfpo.mdb 23 Aug 2017 10:19:52

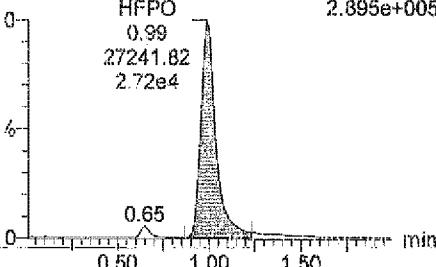
ibration: C:\MassLynx\8321.PRO\CurveDB\hfpo17d24.cdb 24 Apr 2017 13:20:17

sample Name: hfpo717H23083

FPO IS 00004 MRM of 2 channels,ES-
328.8 > 284.8

2.895e+005

HFPO
0.99
27241.82
2.72e4



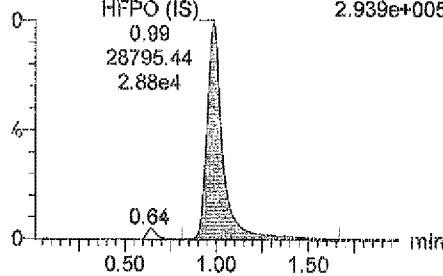
#	Name	Type	Std. Conc.	RT	Area	S/Area	Response	Primar	ppb	%Dev
1	hfpo717H23083		10.000	0.99	27241.822	28795.438	0.946	bd	10.0	-0.4

Dataset: Untitled

Last Altered: Tuesday, August 29, 2017 10:47:21 Mountain Daylight Time
Entered: Tuesday, August 29, 2017 10:47:53 Mountain Daylight Time

Sample Name: hfp0717H23083

PO IS 00004 MRM of 2 channels,ES-
331.8 > 286.8



#	Name	Type	Std. Conc.	RT	Area	(S) Area	Response	Primar...	ppb	%Dev
1	hfp0717H23083		1.000	0.99	28795.438		28795.438	bb	1.2	23.6

Reagent

HFPO I.S._00007

Preliminary Report
TestAmerica Denver
Internal Standard Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171212-65681.b\hfpo717L12074.d
 Lims ID: HFPO IS 00007
 Client ID:
 Sample Type: CCV
 Inject. Date: 12-Dec-2017 15:02:32 ALS Bottle#: 25 Worklist Smp#: 74
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: HFPO IS 00007
 Misc. Info.: HFPO17L12
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171212-65681.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 12-Dec-2017 15:48:38 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK024

Averaged ICal Samples:

\\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10026.d
 \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10027.d
 \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10028.d
 \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10029.d
 \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10030.d
 \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10031.d
 \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10032.d
 \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Area Recoveries, Detector: F1:MRM

Compound	Average Standard	Lower Limit	Upper Limit	Sample	% Rec
* 2 13C3 HFPO-DA (IS)	731446	365723	1462892	740105	101.18

RT Recoveries

Compound	Average Standard	Lower Limit	Upper Limit	Sample	DLT(min.)	% Diff
* 2 13C3 HFPO-DA (IS)	0.880	0.380	1.380	1.056	-0.176	19.997

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.500 minutes of internal standard RT.

RT LOWER LIMIT = - 0.500 minutes of internal standard RT.

Reagent

HFPO-DA_00003



WELLINGTON
LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:
COMPOUND:

HFPDA

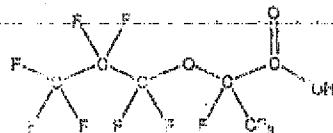
2,2,3,3-tetrafluoro-2-(1,1,2,2,3,3-heptafluoropropoxy)-propanoic acid

LOT NUMBER: HFPDA0213

STRUCTURE:

CAS #:

13262-13-6



MOLECULAR FORMULA: C₄H₆F₁₀O₃
CONCENTRATION: 50 ± 2.5 µg/ml
CHEMICAL PURITY: >98%
LAST TESTED: (mmddyy) 02/05/2014
EXPIRY DATE: (mmddyy) Stability studies ongoing
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 330.05
SOLVENT(S): Methanol

DOCUMENTATION DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

21-0-D25 PB
21-LPL
MDL

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 02/13/2014
(mmddyy)

Wellington Laboratories Inc., 346 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product, unambiguous routes. They are then characterized, and their structures and purity confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, x-ray crystallography and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given solvent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS and/or LC/MS/MS. The relative response factors of the analyte of interest in each solution are required to be $\pm 5\%$ RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $U_r(V)$, of a value V and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$U_r(V(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n U(x_i)^2}$$

where U is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external, ISO/IEC 17020:2006 accredited calibration company, in addition, their calibration is verified prior to each weighing using NIST and/or NIST traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to intermediate interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

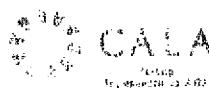
Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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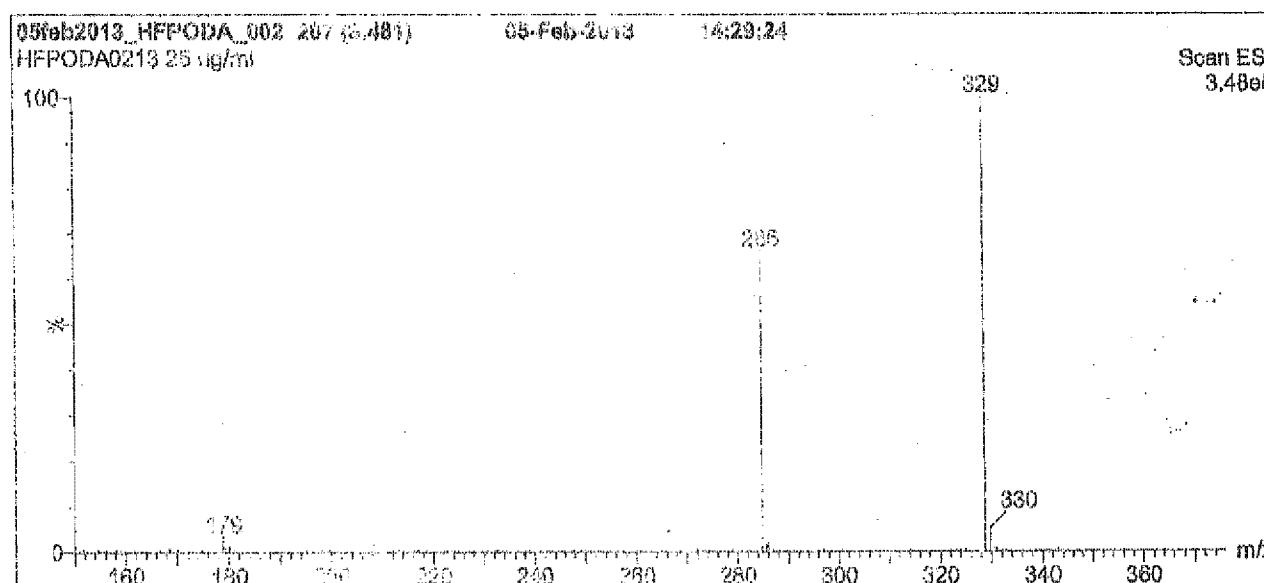
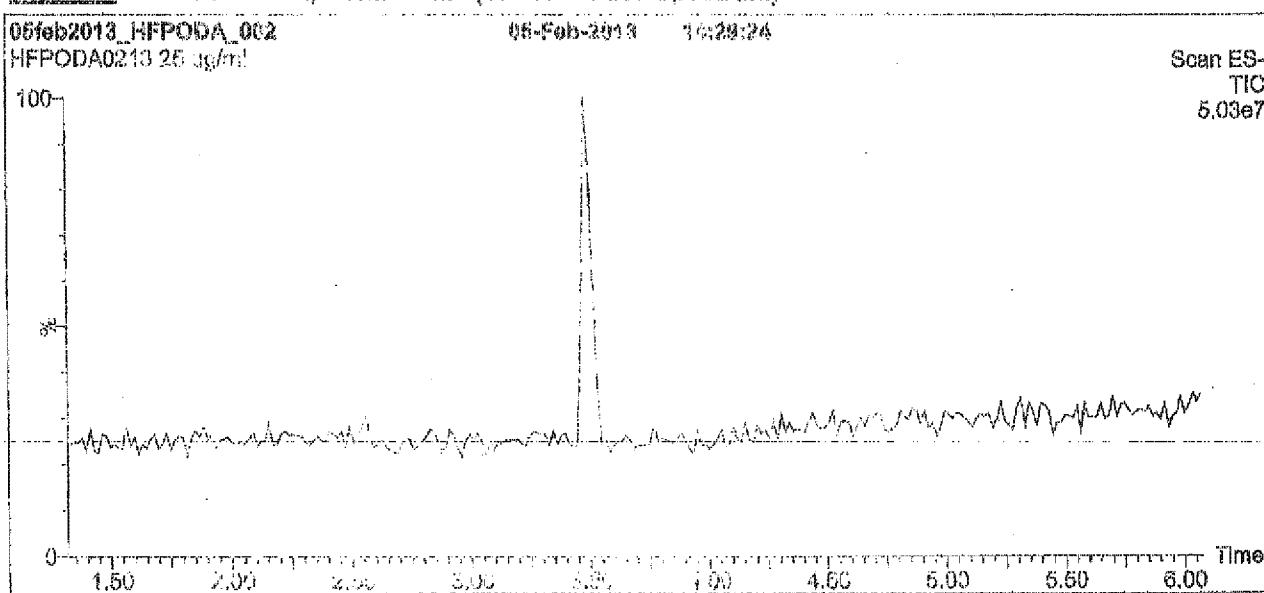
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA, A1226), and ISO GUIDE 34:2009 by ACCLASS (certificate number AF-050).



*For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at iso@well-labs.com**

Figure 1: HFFPO-DA; LC/MS Data (TIC and Mass spectrum)



Conditions for Figure 1:

LC: Waters Acuity UHPLC Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions:

Column: Kinetex PFP
2.6 μm , 4.8 x 100 mm

Mobile phase: Gradient
Start: 40% (0.02% formic acid) / 60% H_2O
Gradient: 10 min. 10 mM NH_4OAc buffer
Ramp to 60% organic over 6 min and hold for 1 min
before returning to initial conditions in 0.5 min.
Time: 11 min

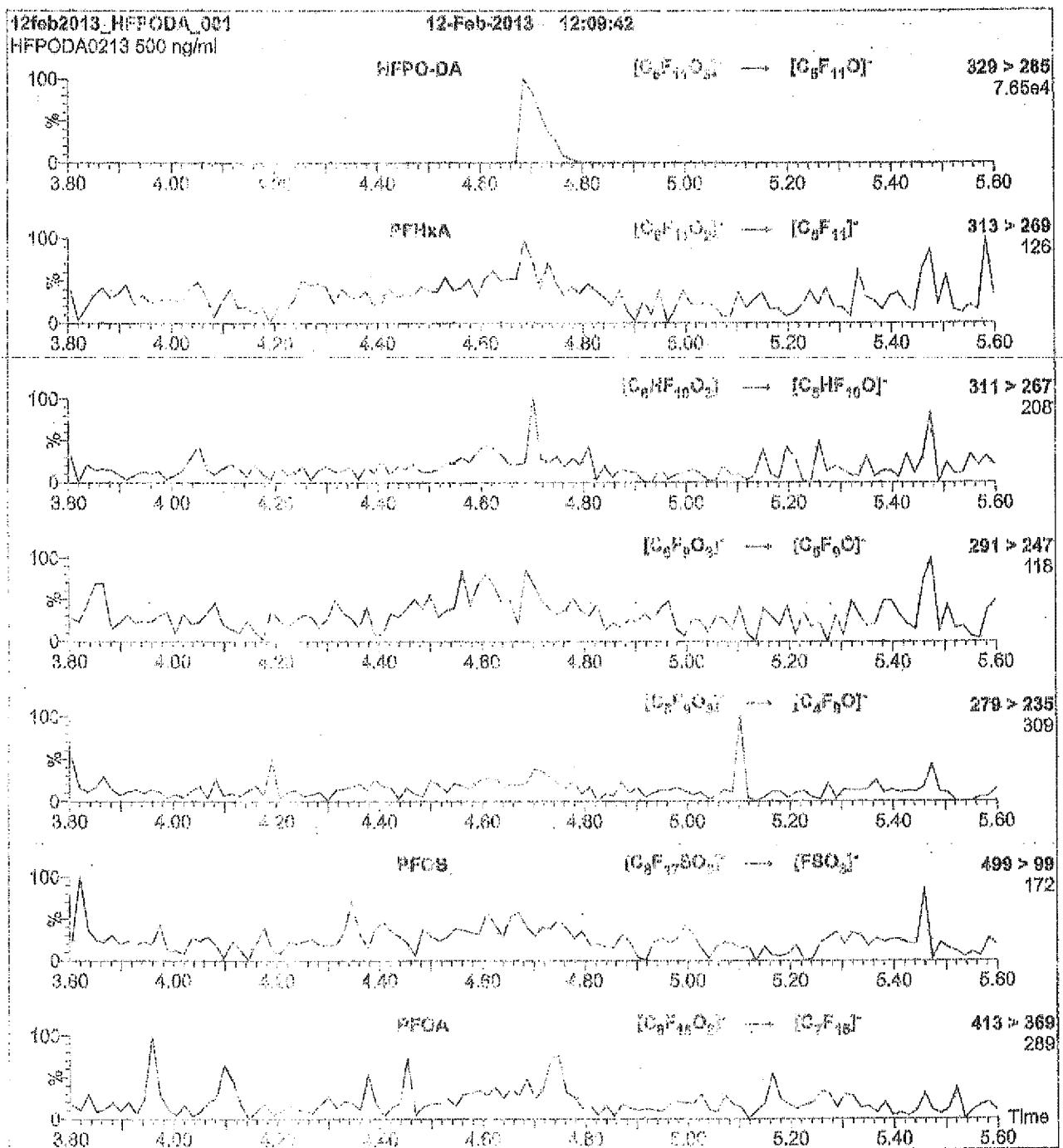
Flow: 0.01 $\mu\text{l}/\text{min}$

MS Parameters:

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 9.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: HFPO-DA LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml HFPO-DA)

ESI Parameters:

Collision Gas (mbar) = 3.87e-3

Mobile phase: Isocratic 80% (60:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄Ac buffer)

Collision Energy (eV) = 5

Flow: 300 μ l/min

Reagent

HFPO-DA 00004



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

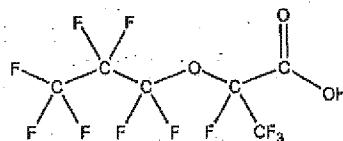
PRODUCT CODE: HFPO-DA

LOT NUMBER: HFPODA0717

COMPOUND: 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid

STRUCTURE:

CAS #: 13252-13-6



MOLECULAR FORMULA: C₆HF₁₁O₃

MOLECULAR WEIGHT: 330.05

CONCENTRATION: 50 ± 2.5 µg/ml

SOLVENT(S): Methanol

CHEMICAL PURITY: >98%

LAST TESTED: (mm/dd/yyyy) 07/13/2017

EXPIRY DATE: (mm/dd/yyyy) 07/13/2020

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Product is commercially known as GenX.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

Date: 07/14/2017

(mm/dd/yyyy)
B.G. Chittim, General Manager

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • Info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to International Interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

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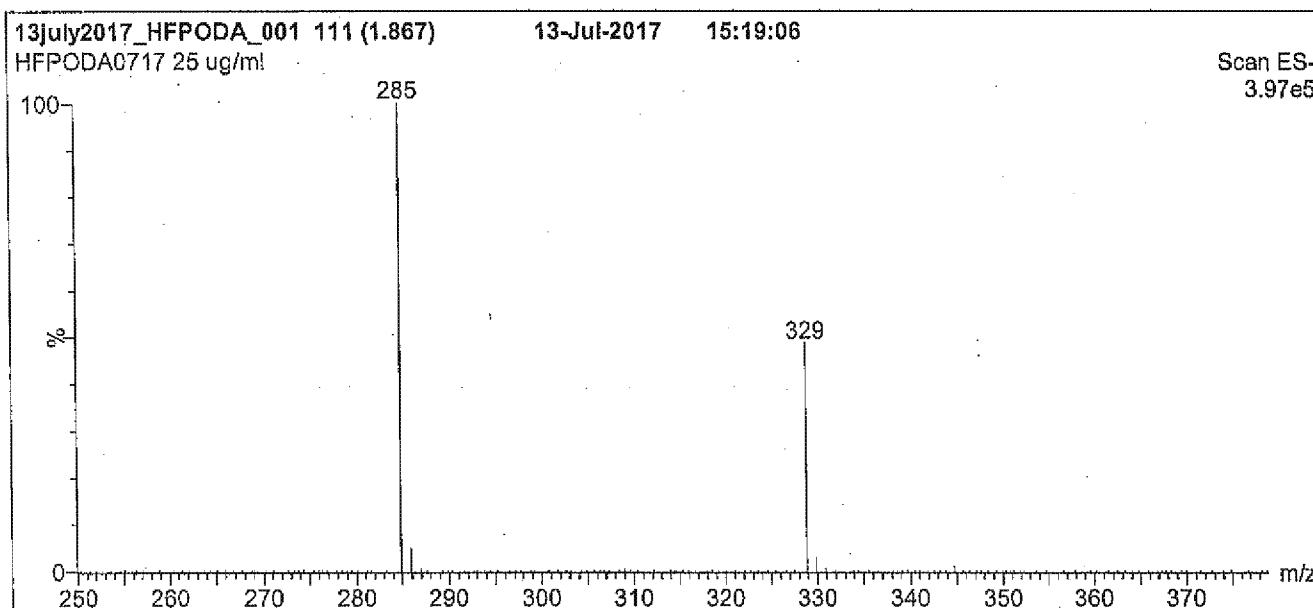
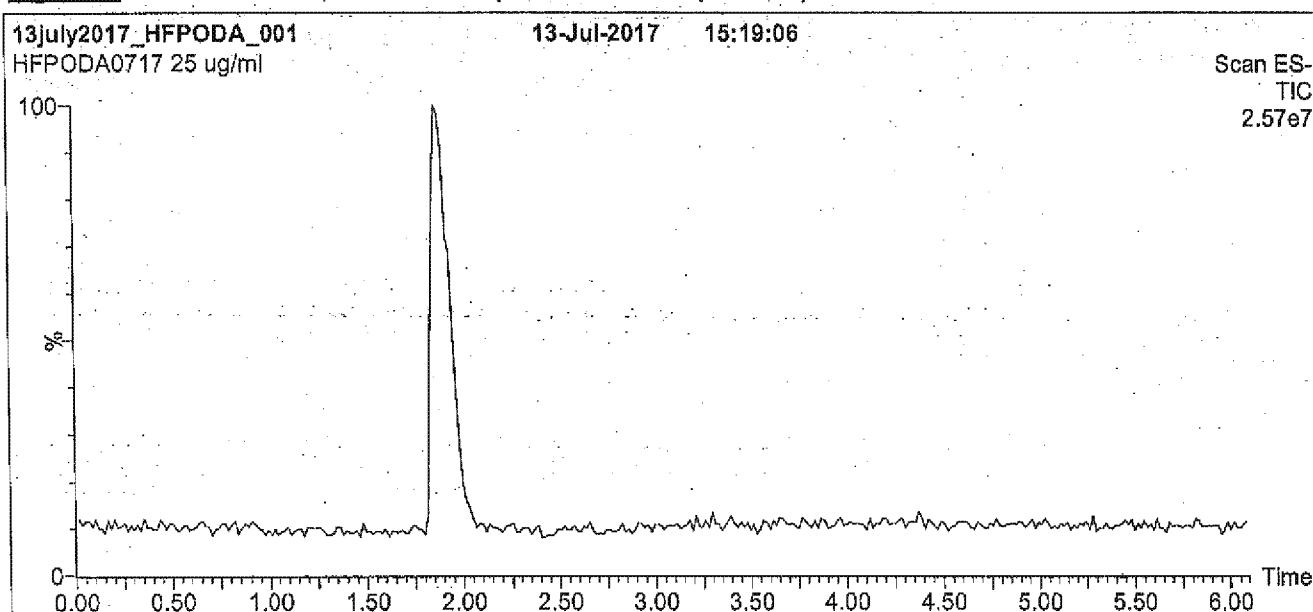
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: HFPO-DA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% MeOH / 45% H₂O with 10 mM NH₄OAc buffer
Ramp to 90% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.

Time: 10 min

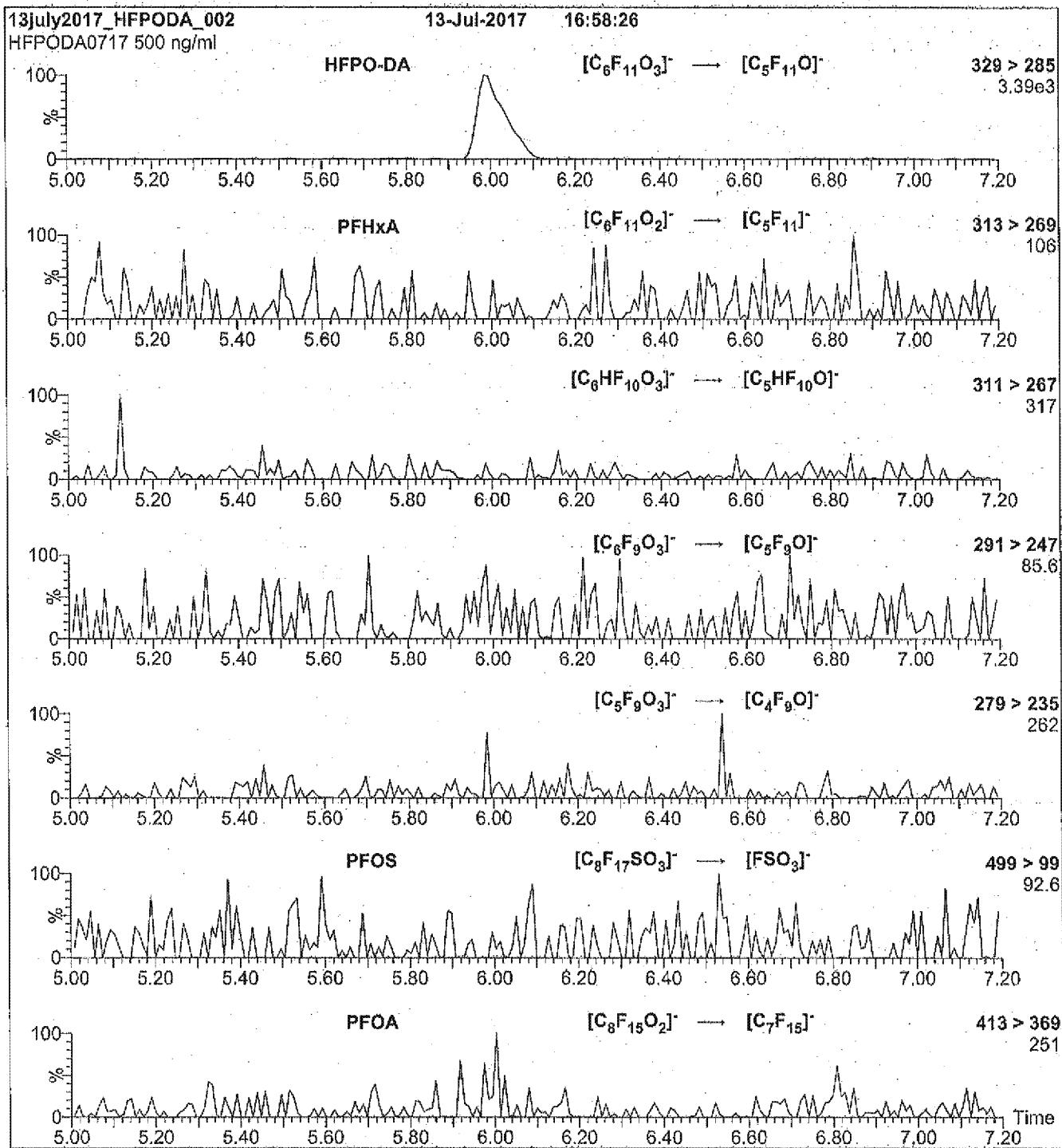
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 10.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 700

Figure 2: HFPO-DA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml HFPO-DA)

MS Parameters

Collision Gas (mbar) = 3.20e-3
Collision Energy (eV) = 5

Mobile phase: Isocratic 80% MeOH / 20% H₂O with 10 mM NH₄OAc buffer

Flow: 300 μ l/min

8321A_HFPO_Du

HFPO-DA

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): Synergi Hyd ID: _____

Client Sample ID	Lab Sample ID	HFPODA #
FAY-D-3516HEART-W1 -1-013018	280-105950-1	102
FAY-D-3516HEART-W1 -2-013018	280-105950-2	104
FAY-D-3521HEART-W1 -1-013018	280-105950-3	103
FAY-D-3521HEART-W1 -2-013018	280-105950-4	93
FAY-D-3619HEART-W1 -1-013018	280-105950-5	100
FAY-D-3619HEART-W1 -2-013018	280-105950-6	106
FAY-D-3615HEART-W1 -1-013018	280-105950-7	104
FAY-D-3615HEART-W1 -2-013018	280-105950-8	102
FAY-D-3634HEART-W1 -1-013018	280-105950-9	103
FAY-D-3634HEART-W1 -2-013018	280-105950-10	104
FAY-D-FB-013018	280-105950-11	105
FAY-D-46MEDOW-W1-1 -013018	280-105950-12	112
FAY-D-196UPTON-W1- 1-013018	280-105950-13	112
FAY-D-170MEDOW-W1- 1-013018	280-105950-14	115
FAY-D-170MEDOW-W1- 1-013018-D	280-105950-15	111
FAY-D-102UFTON-W1- 1-013018	280-105950-16	114
FAY-D-121HILLT-W1- 1-013018	280-105950-17	112
FAY-D-99DRYES-W1-1 -013018	280-105950-18	110
FAY-D-6110CHKFT-W1 -1-013018	280-105950-19	109
FAY-D-6695CHKFT-W1 -1-013018	280-105950-20	110
FAY-D-3662HEART-W1 -1-013018	280-105950-21	111
FAY-D-3662HEART-W1 -2-013018	280-105950-22	105
FAY-D-3655HEART-W1 -1-013018	280-105950-23	114
FAY-D-3655HEART-W1 -2-013018	280-105950-24	116
FAY-D-3720HEART-W1 -1-013018	280-105950-25	111

QC LIMITS

50-200

HFPODA = 13C3 HFPO-DA

Column to be used to flag recovery values

FORM II 8321A

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): Synergi Hyd ID: _____

Client Sample ID	Lab Sample ID	HFPEDA #
FAY-D-3720HEART-W2 -1-013018	280-105950-26	110
FAY-D-3721HEART-W1 -1-013018	280-105950-27	111
FAY-D-3721HEART-W1 -2-013018	280-105950-28	111
FAY-D-3745HEART-W1 -1-013018	280-105950-29	111
FAY-D-3745HEART-W1 -2-013018	280-105950-30	119
FAY-D-3765HEART-W1 -1-013018	280-105950-31	87
FAY-D-6676NC87H-W1 -1-013018	280-105950-32	87
FAY-D-6740NC87H-W1 -1-013018	280-105950-33	90
FAY-D-6740NC87H-W1 -2-013018	280-105950-34	92
FAY-D-3833Heart-W1 -1-013018	280-105950-35	92
FAY-D-3833Heart-W1 -2-013018	280-105950-36	102
FAY-D-3624PNEBR-W1 -1-013018	280-105950-37	95
FAY-D-3624PNEBR-W1 -2-013018D	280-105950-38	90
FAY-D-3833HEART-W1 -1-013018D	280-105950-39	86
FAY-D-3624PNEBR-W1 -2-013018	280-105950-40	91
	MB 280-403988/1-A	104
	MB 280-404157/1-A	112
	MB 280-404355/1-A	96
	LCS 280-403988/2-A	99
	LCS 280-404157/2-A	112
	LCS 280-404355/2-A	92
	LCSD 280-403988/3-A	102
	LCSD 280-404157/3-A	119
	LCSD 280-404355/3-A	105

HFPEDA = 13C3 HFPO-DA

QC LIMITS
50-200

Column to be used to flag recovery values

FORM II 8321A

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): Synergi Hyd ID: _____

Client Sample ID	Lab Sample ID	HFPEDA #
	LLCS 280-403988/4-A	102
	LLCS 280-404157/4-A	119
	LLCS 280-404355/4-A	92
FAY-D-170MEDOW-W1- 1-013018 MS	280-105950-14 MS	112
FAY-D-3624PNEBR-W1 -2-013018 MS	280-105950-40 MS	119
FAY-D-170MEDOW-W1- 1-013018 DU	280-105950-14 DU	112
FAY-D-3624PNEBR-W1 -2-013018 DU	280-105950-40 DU	89
	DLCK 280-390728/12	102
	DLCK 280-404345/13	104

HFPEDA = 13C3 HFPO-DA

QC LIMITS
50-200

Column to be used to flag recovery values

FORM II 8321A

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: hfpo718B07005.d

Lab ID: LCS 280-403988/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
HFPO-DA	0.200	0.173	86	70-130	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: hfpo718B08047.d

Lab ID: LCS 280-404157/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
HFPO-DA	0.200	0.160	80	70-130	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: hfpo718B09015.d

Lab ID: LCS 280-404355/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
HFPO-DA	0.200	0.227	114	70-130	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: hfpo718B07006.d

Lab ID: LCSD 280-403988/3-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD REC	%	QC LIMITS		#
					RPD	RPD	
HFPO-DA	0.200	0.171	85	1	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: hfpo718B08048.d

Lab ID: LCSD 280-404157/3-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD REC	%	QC LIMITS		#
					RPD	RPD	
HFPO-DA	0.200	0.160	80	0	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: hfpo718B09016.d

Lab ID: LCSD 280-404355/3-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD REC	%	QC LIMITS		#
					RPD	RPD	
HFPO-DA	0.200	0.212	106	7	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LOW LEVEL CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: hfpo718B07007.d

Lab ID: LLCS 280-403988/4-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LLCS CONCENTRATION (ug/L)	LLCS REC	QC LIMITS REC	#
HFPO-DA	0.0200	0.0139	70	70-130	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LOW LEVEL CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: hfpo718B08049.d

Lab ID: LLCS 280-404157/4-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LLCS CONCENTRATION (ug/L)	LLCS % REC	QC LIMITS REC	#
HFPO-DA	0.0200	0.0148	74	70-130	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LOW LEVEL CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: hfpo718B09017.d

Lab ID: LLCS 280-404355/4-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LLCS CONCENTRATION (ug/L)	LLCS REC	QC LIMITS REC	#
HFPO-DA	0.0200	0.0203	101	70-130	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: hfpo718B08055.d

Lab ID: 280-105950-14 MS Client ID: FAY-D-170MEDOW-W1-1-013018 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
HFPO-DA	0.198	0.021	0.183	81	70-130	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: hfpo718B09041.d

Lab ID: 280-105950-40 MS Client ID: FAY-D-3624PNEBR-W1-2-013018 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
HFPO-DA	0.191	0.10	0.261	84	70-130	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS DETECTION LIMIT CHECK STANDARD RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: hfpo717J10035.d

Lab ID: DLCK 280-390728/12 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	DLCK CONCENTRATION (ug/L)	DLCK % REC	QC LIMITS REC	#
HFPO-DA	0.250	<0.50	78	70-130	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS DETECTION LIMIT CHECK STANDARD RECOVERY

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: hfpo718B08044.d

Lab ID: DLCK 280-404345/13 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	DLCK CONCENTRATION (ug/L)	DLCK % REC	QC LIMITS REC	#
HFPO-DA	0.250	<0.50	90	70-130	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-105950-1
SDG No.:
Lab File ID: hfpo718B07004.d Lab Sample ID: MB 280-403988/1-A
Matrix: Water Date Extracted: 02/06/2018 09:31
Instrument ID: LC_LCMS7 Date Analyzed: 02/07/2018 08:19
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-403988/2-A	hfpo718B070 05.d	02/07/2018 08:23
	LCSD 280-403988/3-A	hfpo718B070 06.d	02/07/2018 08:26
	LLCS 280-403988/4-A	hfpo718B070 07.d	02/07/2018 08:29
FAY-D-3516HEART-W1-1-013018	280-105950-1	hfpo718B070 19.d	02/07/2018 09:08
FAY-D-3516HEART-W1-2-013018	280-105950-2	hfpo718B070 20.d	02/07/2018 09:11
FAY-D-3521HEART-W1-1-013018	280-105950-3	hfpo718B070 21.d	02/07/2018 09:15
FAY-D-3521HEART-W1-2-013018	280-105950-4	hfpo718B070 22.d	02/07/2018 09:18
FAY-D-3619HEART-W1-1-013018	280-105950-5	hfpo718B070 23.d	02/07/2018 09:21
FAY-D-3619HEART-W1-2-013018	280-105950-6	hfpo718B070 24.d	02/07/2018 09:25
FAY-D-3615HEART-W1-1-013018	280-105950-7	hfpo718B070 26.d	02/07/2018 09:31
FAY-D-3615HEART-W1-2-013018	280-105950-8	hfpo718B070 27.d	02/07/2018 09:34
FAY-D-3634HEART-W1-1-013018	280-105950-9	hfpo718B070 28.d	02/07/2018 09:38
FAY-D-3634HEART-W1-2-013018	280-105950-10	hfpo718B070 29.d	02/07/2018 09:41
FAY-D-FB-013018	280-105950-11	hfpo718B070 30.d	02/07/2018 09:44
FAY-D-46MEDOW-W1-1-013018	280-105950-12	hfpo718B070 31.d	02/07/2018 09:47

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-105950-1
SDG No.:
Lab File ID: hfpo718B08046.d Lab Sample ID: MB 280-404157/1-A
Matrix: Water Date Extracted: 02/07/2018 10:33
Instrument ID: LC_LCMS7 Date Analyzed: 02/08/2018 13:44
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-404157/2-A	hfpo718B080 47.d	02/08/2018 13:47
	LCSD 280-404157/3-A	hfpo718B080 48.d	02/08/2018 13:50
	LLCS 280-404157/4-A	hfpo718B080 49.d	02/08/2018 13:54
FAY-D-196UPTON-W1-1-013018	280-105950-13	hfpo718B080 52.d	02/08/2018 14:03
FAY-D-170MEDOW-W1-1-013018	280-105950-14	hfpo718B080 53.d	02/08/2018 14:07
FAY-D-170MEDOW-W1-1-013018 DU	280-105950-14 DU	hfpo718B080 54.d	02/08/2018 14:10
FAY-D-170MEDOW-W1-1-013018 MS	280-105950-14 MS	hfpo718B080 55.d	02/08/2018 14:13
FAY-D-170MEDOW-W1-1-013018-D	280-105950-15	hfpo718B080 57.d	02/08/2018 14:20
FAY-D-102UPTON-W1-1-013018	280-105950-16	hfpo718B080 58.d	02/08/2018 14:23
FAY-D-121HILLT-W1-1-013018	280-105950-17	hfpo718B080 59.d	02/08/2018 14:26
FAY-D-99DRYES-W1-1-013018	280-105950-18	hfpo718B080 60.d	02/08/2018 14:29
FAY-D-6110CHKFT-W1-1-013018	280-105950-19	hfpo718B080 61.d	02/08/2018 14:33
FAY-D-6695CHKFT-W1-1-013018	280-105950-20	hfpo718B080 62.d	02/08/2018 14:36
FAY-D-3662HEART-W1-1-013018	280-105950-21	hfpo718B080 63.d	02/08/2018 14:39
FAY-D-3662HEART-W1-2-013018	280-105950-22	hfpo718B080 64.d	02/08/2018 14:42
FAY-D-3655HEART-W1-1-013018	280-105950-23	hfpo718B080 65.d	02/08/2018 14:46
FAY-D-3655HEART-W1-2-013018	280-105950-24	hfpo718B080 66.d	02/08/2018 14:49
FAY-D-3720HEART-W1-1-013018	280-105950-25	hfpo718B080 68.d	02/08/2018 14:56
FAY-D-3720HEART-W2-1-013018	280-105950-26	hfpo718B080 69.d	02/08/2018 14:59
FAY-D-3721HEART-W1-1-013018	280-105950-27	hfpo718B080 70.d	02/08/2018 15:02
FAY-D-3721HEART-W1-2-013018	280-105950-28	hfpo718B080 71.d	02/08/2018 15:05
FAY-D-3745HEART-W1-1-013018	280-105950-29	hfpo718B080 72.d	02/08/2018 15:09

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-105950-1
SDG No.:
Lab File ID: hfpo718B08046.d Lab Sample ID: MB 280-404157/1-A
Matrix: Water Date Extracted: 02/07/2018 10:33
Instrument ID: LC_LCMS7 Date Analyzed: 02/08/2018 13:44
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
FAY-D-3745HEART-W1-2-013018	280-105950-30	hfpo718B080 73.d	02/08/2018 15:12

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-105950-1
SDG No.:
Lab File ID: hfpo718B09014.d Lab Sample ID: MB 280-404355/1-A
Matrix: Water Date Extracted: 02/08/2018 17:57
Instrument ID: LC_LCMS7 Date Analyzed: 02/09/2018 09:21
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-404355/2-A	hfpo718B090 15.d	02/09/2018 09:24
	LCSD 280-404355/3-A	hfpo718B090 16.d	02/09/2018 09:28
	LLCS 280-404355/4-A	hfpo718B090 17.d	02/09/2018 09:31
FAY-D-3765HEART-W1-1-013018	280-105950-31	hfpo718B090 29.d	02/09/2018 10:10
FAY-D-6676NC87H-W1-1-013018	280-105950-32	hfpo718B090 30.d	02/09/2018 10:13
FAY-D-6740NC87H-W1-1-013018	280-105950-33	hfpo718B090 31.d	02/09/2018 10:16
FAY-D-6740NC87H-W1-2-013018	280-105950-34	hfpo718B090 32.d	02/09/2018 10:20
FAY-D-3833Heart-W1-1-013018	280-105950-35	hfpo718B090 33.d	02/09/2018 10:23
FAY-D-3833Heart-W1-2-013018	280-105950-36	hfpo718B090 34.d	02/09/2018 10:26
FAY-D-3624PNEBR-W1-1-013018	280-105950-37	hfpo718B090 36.d	02/09/2018 10:33
FAY-D-3624PNEBR-W1-2-013018D	280-105950-38	hfpo718B090 37.d	02/09/2018 10:36
FAY-D-3833HEART-W1-1-013018D	280-105950-39	hfpo718B090 38.d	02/09/2018 10:39
FAY-D-3624PNEBR-W1-2-013018	280-105950-40	hfpo718B090 39.d	02/09/2018 10:42
FAY-D-3624PNEBR-W1-2-013018 DU	280-105950-40 DU	hfpo718B090 40.d	02/09/2018 10:46
FAY-D-3624PNEBR-W1-2-013018 MS	280-105950-40 MS	hfpo718B090 41.d	02/09/2018 10:49

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3516HEART-W1-1-0130 Lab Sample ID: 280-105950-1
18 _____

Matrix: Water Lab File ID: hfpo718B07019.d

Analysis Method: 8321A Date Collected: 01/30/2018 08:25

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 234.5 (mL) Date Analyzed: 02/07/2018 09:08

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	102		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07019.d
 Lims ID: 280-105950-A-1-A
 Client ID: FAY-D-3516HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:08:40 ALS Bottle#: 25 Worklist Smp#: 19
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-1-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:03 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:20:09

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA

331.8 > 286.8 0.961 0.961 0.0 1.000 747704 10.2 1444

* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 0.961 0.961 0.0 1.000 747704 10.0 1444

1 Perfluoro(2-propoxypropanoic) acid M

328.8 > 284.8 0.961 0.988 -0.027 1.000 16910 0.007587 3.1 M

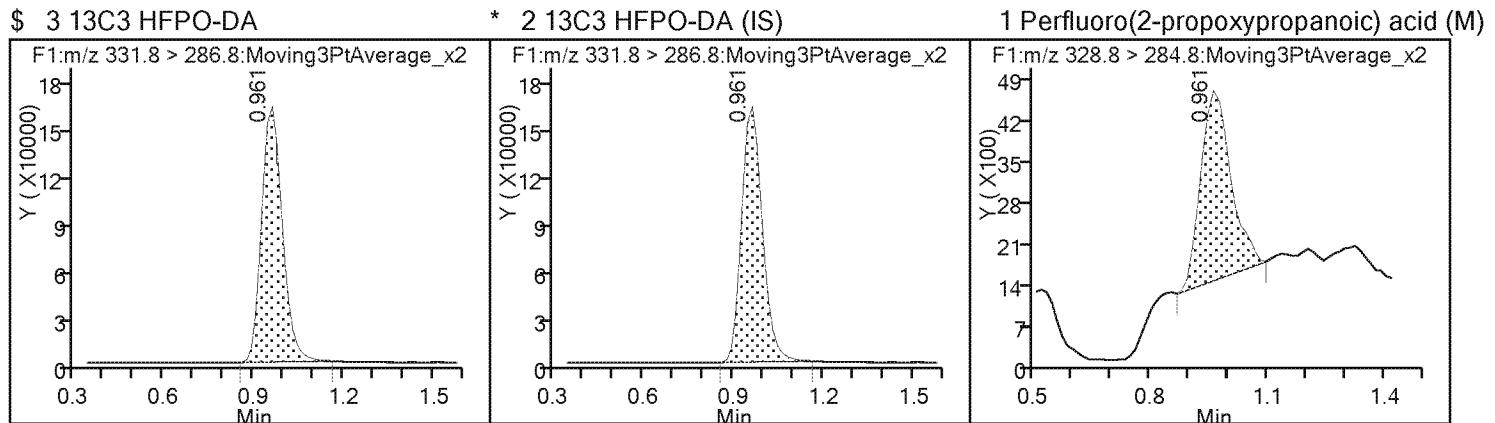
QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07019.d
Injection Date: 07-Feb-2018 09:08:40 Instrument ID: LC_LCMS7
Lims ID: 280-105950-A-1-A Lab Sample ID: 280-105950-1
Client ID: FAY-D-3516HEART-W1-1-013018
Operator ID: JBH ALS Bottle#: 25 Worklist Smp#: 19
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07019.d
 Lims ID: 280-105950-A-1-A
 Client ID: FAY-D-3516HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:08:40 ALS Bottle#: 25 Worklist Smp#: 19
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-1-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:03 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:20:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.2	102.22

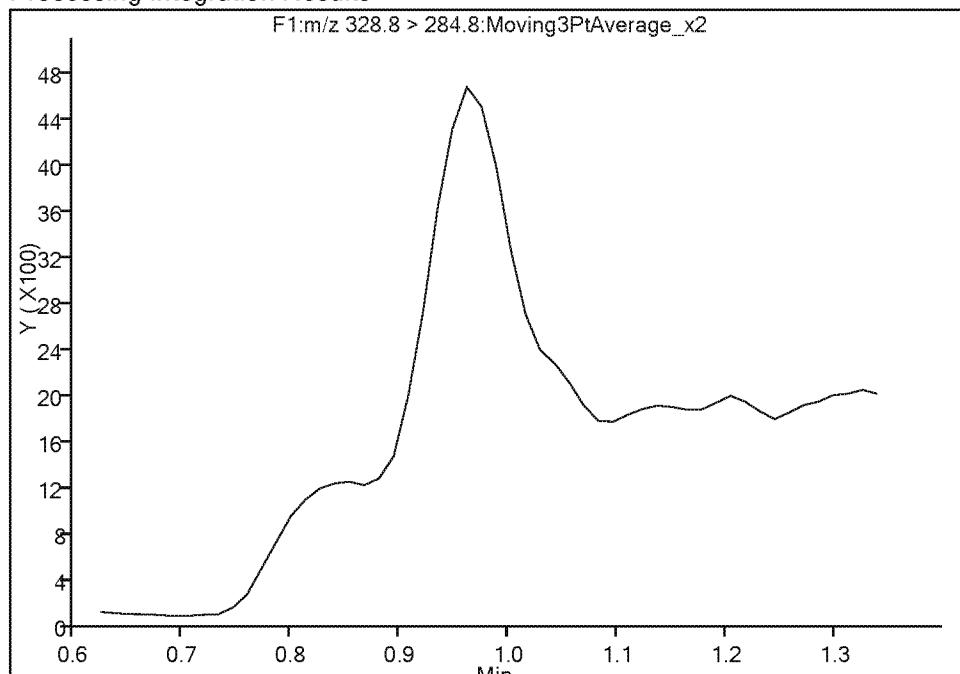
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07019.d
 Injection Date: 07-Feb-2018 09:08:40 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-A-1-A Lab Sample ID: 280-105950-1
 Client ID: FAY-D-3516HEART-W1-1-013018
 Operator ID: JBH ALS Bottle#: 25 Worklist Smp#: 19
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6
 Signal: 1

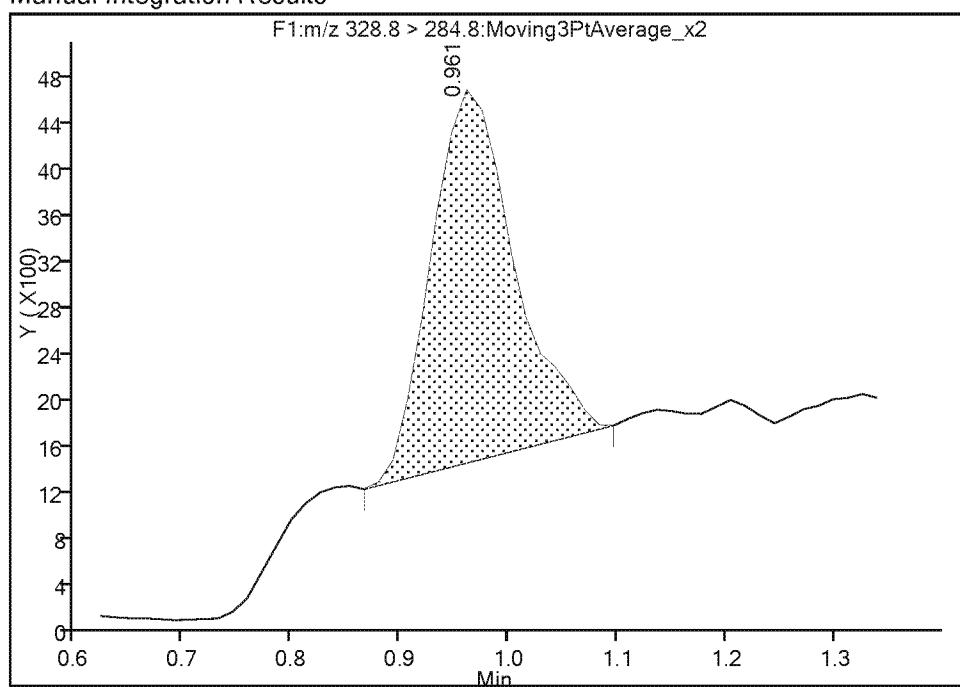
Not Detected
 Expected RT: 0.99

Processing Integration Results



RT: 0.96
 Area: 16910
 Amount: 0.007587
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 07-Feb-2018 11:20:25

Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3516HEART-W1-2-0130 Lab Sample ID: 280-105950-2
18

Matrix: Water Lab File ID: hfpo718B07020.d

Analysis Method: 8321A Date Collected: 01/30/2018 08:23

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 253.2 (mL) Date Analyzed: 02/07/2018 09:11

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	104		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07020.d
 Lims ID: 280-105950-C-2-A
 Client ID: FAY-D-3516HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:11:55 ALS Bottle#: 26 Worklist Smp#: 20
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-2-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:03 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:20:14

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
331.8 > 286.8 0.961 0.961 0.0 1.000 761217 10.4 1802

* 2 13C3 HFPO-DA (IS)
331.8 > 286.8 0.961 0.961 0.0 1.000 761217 10.0 1802

1 Perfluoro(2-propoxypropanoic) acid
328.8 > 284.8 0.961 0.988 -0.027 1.000 17099 0.006073 3.2 M

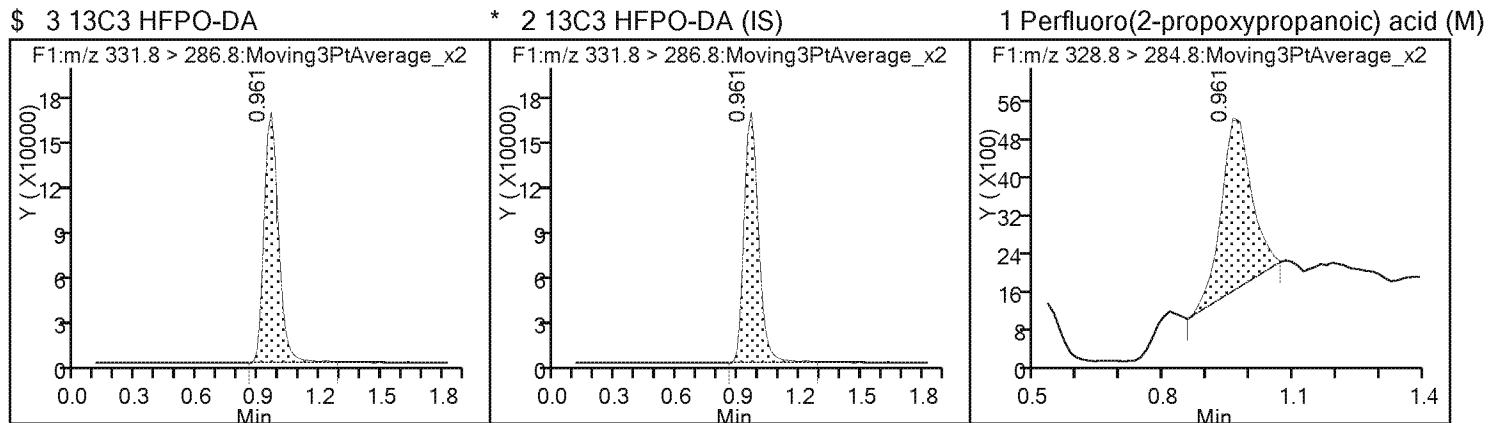
QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07020.d
Injection Date: 07-Feb-2018 09:11:55 Instrument ID: LC_LCMS7
Lims ID: 280-105950-C-2-A Lab Sample ID: 280-105950-2
Client ID: FAY-D-3516HEART-W1-2-013018
Operator ID: JBH ALS Bottle#: 26 Worklist Smp#: 20
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07020.d
 Lims ID: 280-105950-C-2-A
 Client ID: FAY-D-3516HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:11:55 ALS Bottle#: 26 Worklist Smp#: 20
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-2-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:03 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:20:14

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.4	104.07

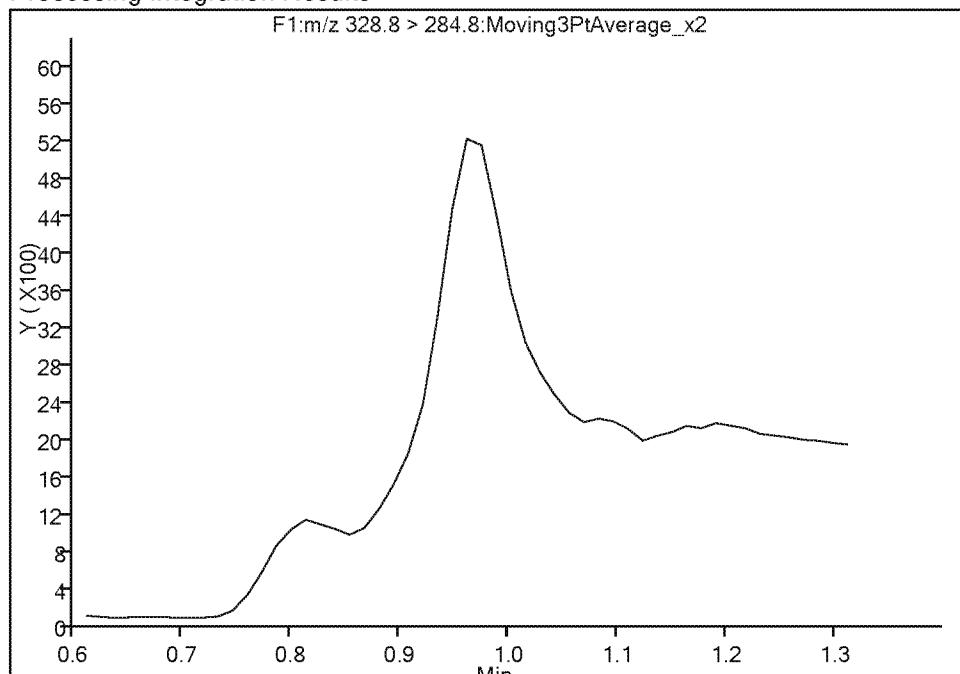
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07020.d
 Injection Date: 07-Feb-2018 09:11:55 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-C-2-A Lab Sample ID: 280-105950-2
 Client ID: FAY-D-3516HEART-W1-2-013018
 Operator ID: JBH ALS Bottle#: 26 Worklist Smp#: 20
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6
 Signal: 1

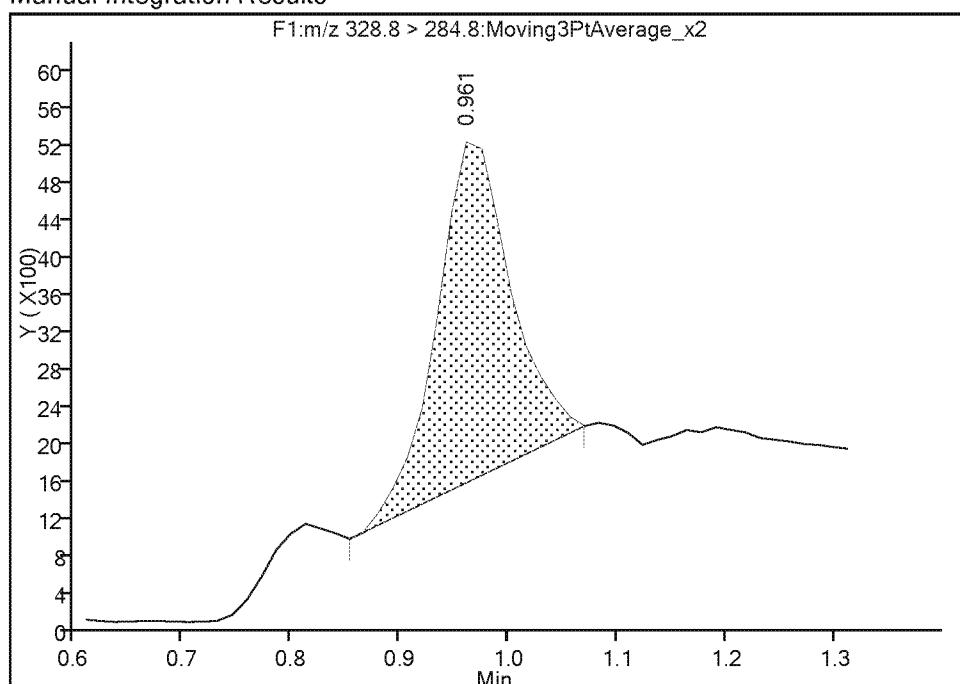
Not Detected
 Expected RT: 0.99

Processing Integration Results



RT: 0.96
 Area: 17099
 Amount: 0.006073
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 07-Feb-2018 11:20:50

Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3521HEART-W1-1-0130 Lab Sample ID: 280-105950-3
18

Matrix: Water Lab File ID: hfpo718B07021.d

Analysis Method: 8321A Date Collected: 01/30/2018 08:46

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 241.5 (mL) Date Analyzed: 02/07/2018 09:15

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	103		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07021.d
 Lims ID: 280-105950-A-3-A
 Client ID: FAY-D-3521HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:15:11 ALS Bottle#: 27 Worklist Smp#: 21
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-3-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:03 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

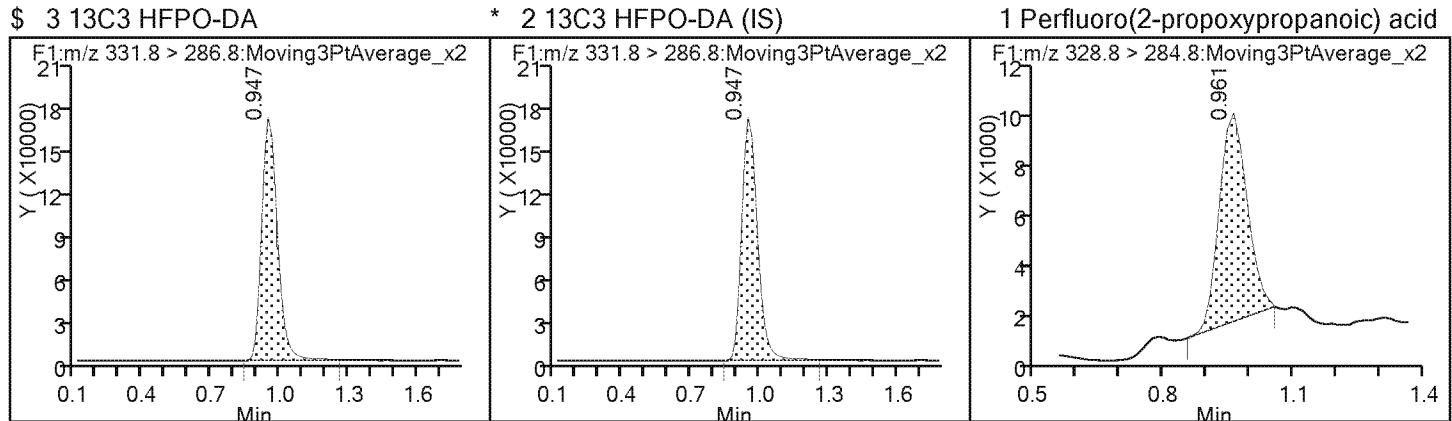
First Level Reviewer: meyera Date: 07-Feb-2018 11:20:56

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.947 0.961 -0.014 1.000 753927 10.3 1606
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.947 0.961 -0.014 1.000 753927 10.0 1606
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.961 0.988 -0.027 1.000 34479 0.2360 7.5

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07021.d
Injection Date: 07-Feb-2018 09:15:11 Instrument ID: LC_LCMS7
Lims ID: 280-105950-A-3-A Lab Sample ID: 280-105950-3
Client ID: FAY-D-3521HEART-W1-1-013018
Operator ID: JBH ALS Bottle#: 27 Worklist Smp#: 21
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07021.d
 Lims ID: 280-105950-A-3-A
 Client ID: FAY-D-3521HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:15:11 ALS Bottle#: 27 Worklist Smp#: 21
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-3-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:03 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:20:56

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.3	103.07

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3521HEART-W1-2-0130 Lab Sample ID: 280-105950-4
18 _____

Matrix: Water Lab File ID: hfpo718B07022.d

Analysis Method: 8321A Date Collected: 01/30/2018 11:33

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 239.4 (mL) Date Analyzed: 02/07/2018 09:18

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	93		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07022.d
 Lims ID: 280-105950-B-4-A
 Client ID: FAY-D-3521HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:18:27 ALS Bottle#: 28 Worklist Smp#: 22
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-4-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:03 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:21:11

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA

331.8 > 286.8 0.907 0.961 -0.054 1.000 679345 9.29 1716

* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 0.907 0.961 -0.054 679345 10.0 1716

1 Perfluoro(2-propoxypropanoic) acid M

328.8 > 284.8 0.920 0.988 -0.068 1.000 38742 0.3476 3.8 M

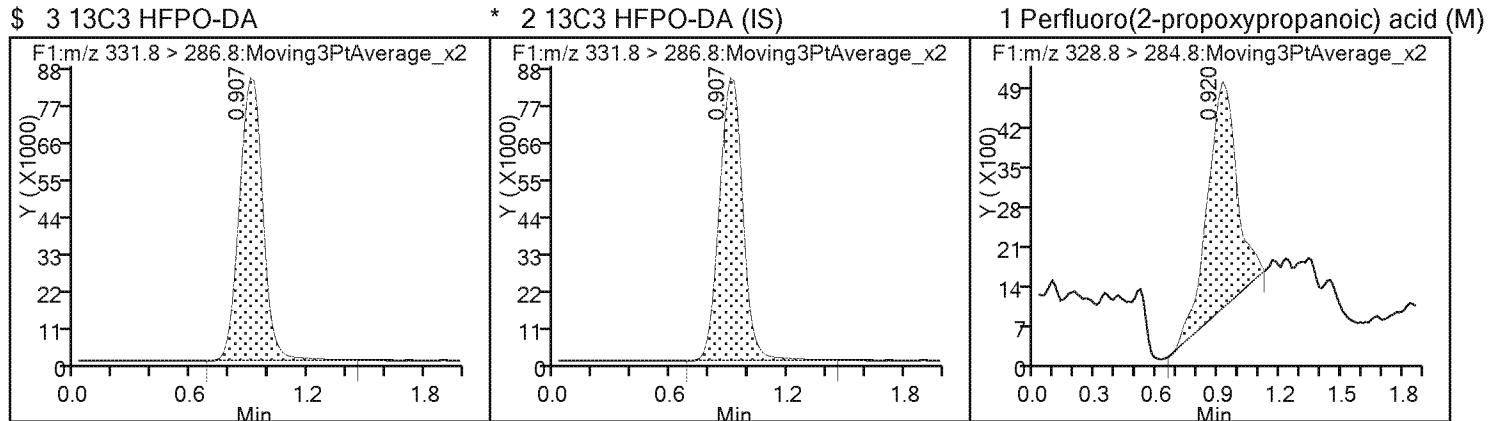
QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfp0718B07022.d
Injection Date: 07-Feb-2018 09:18:27 Instrument ID: LC_LCMS7
Lims ID: 280-105950-B-4-A Lab Sample ID: 280-105950-4
Client ID: FAY-D-3521HEART-W1-2-013018
Operator ID: JBH ALS Bottle#: 28 Worklist Smp#: 22
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07022.d
 Lims ID: 280-105950-B-4-A
 Client ID: FAY-D-3521HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:18:27 ALS Bottle#: 28 Worklist Smp#: 22
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-4-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:03 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:21:11

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	9.29	92.88

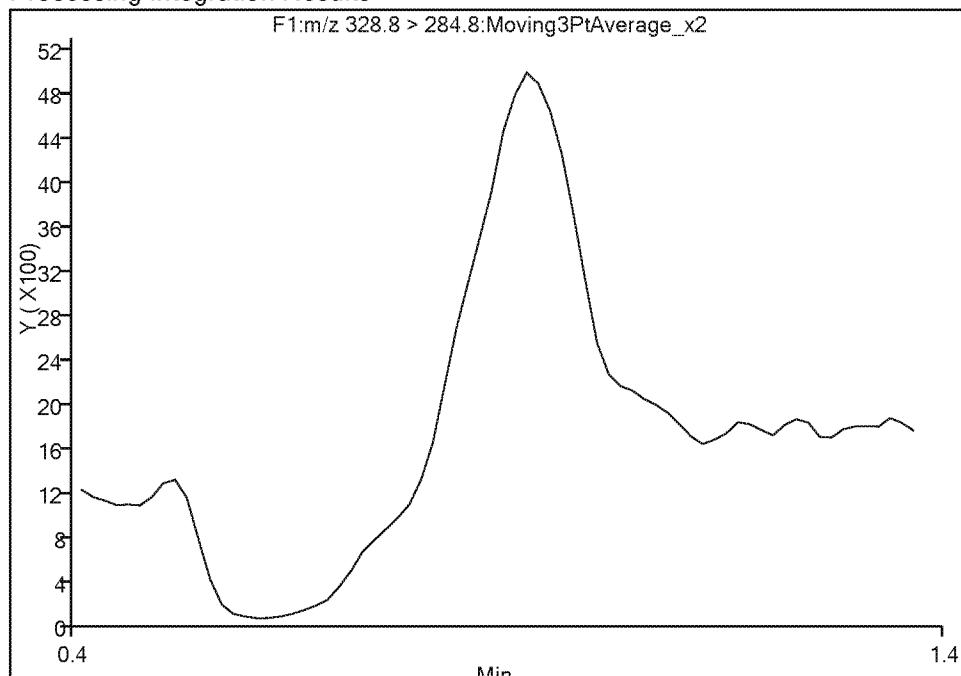
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07022.d
 Injection Date: 07-Feb-2018 09:18:27 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-B-4-A Lab Sample ID: 280-105950-4
 Client ID: FAY-D-3521HEART-W1-2-013018
 Operator ID: JBH ALS Bottle#: 28 Worklist Smp#: 22
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6
 Signal: 1

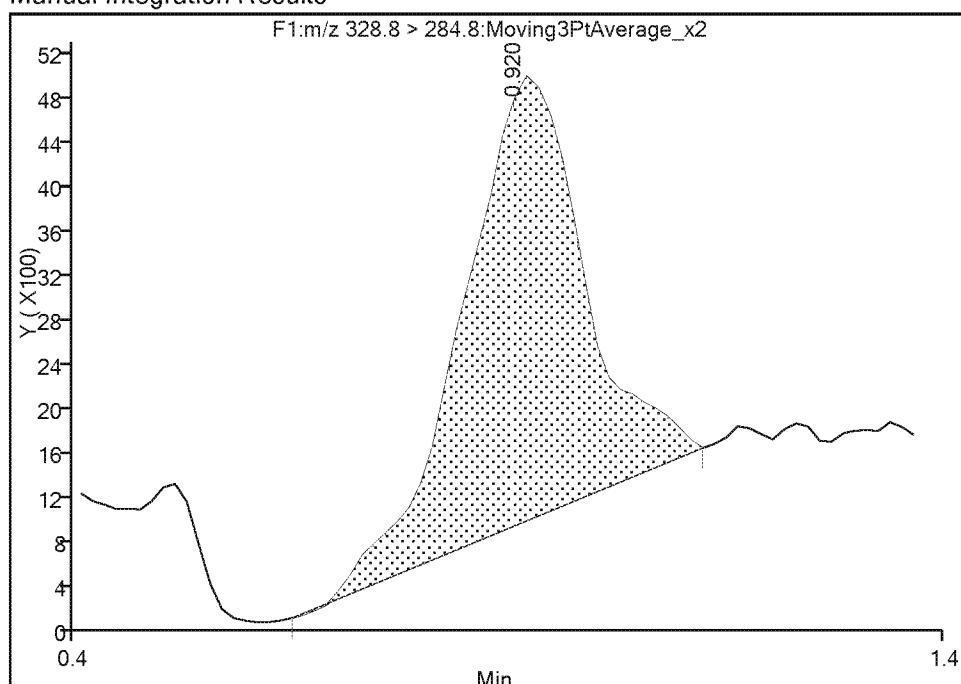
Not Detected
 Expected RT: 0.99

Processing Integration Results



RT: 0.92
 Area: 38742
 Amount: 0.347600
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 07-Feb-2018 11:21:08

Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3619HEART-W1-1-0130 Lab Sample ID: 280-105950-5
18 _____

Matrix: Water Lab File ID: hfpo718B07023.d

Analysis Method: 8321A Date Collected: 01/30/2018 09:09

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 248.4 (mL) Date Analyzed: 02/07/2018 09:21

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.030		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	100		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07023.d
 Lims ID: 280-105950-B-5-A
 Client ID: FAY-D-3619HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:21:42 ALS Bottle#: 29 Worklist Smp#: 23
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-5-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:03 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:21:23

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
331.8 > 286.8 0.961 0.961 0.0 1.000 734206 10.0 1557

* 2 13C3 HFPO-DA (IS)
331.8 > 286.8 0.961 0.961 0.0 1.000 734206 10.0 1557

1 Perfluoro(2-propoxypropanoic) acid
328.8 > 284.8 0.975 0.988 -0.013 1.000 128166 1.51 21.4 M

QC Flag Legend

Review Flags

M - Manually Integrated

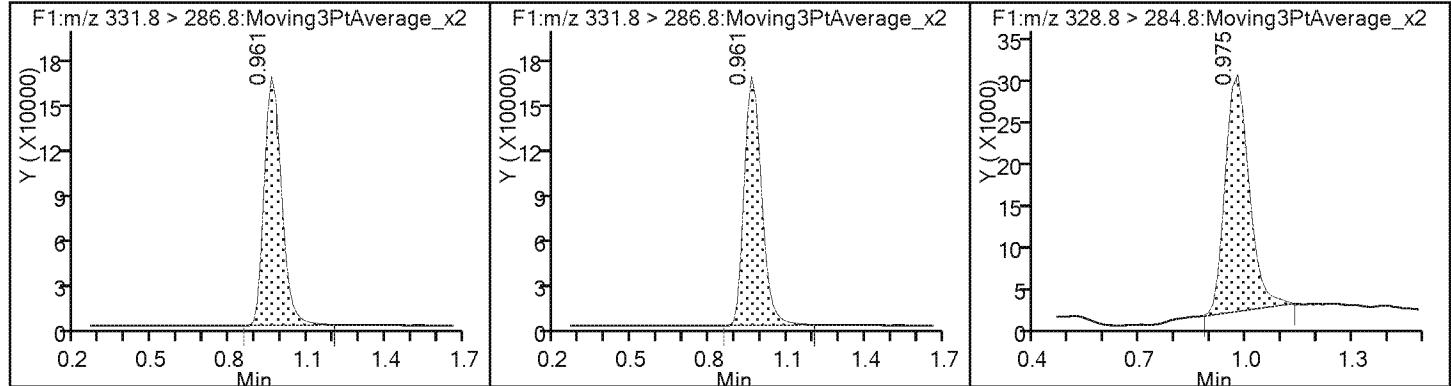
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07023.d
Injection Date: 07-Feb-2018 09:21:42 Instrument ID: LC_LCMS7
Lims ID: 280-105950-B-5-A Lab Sample ID: 280-105950-5
Client ID: FAY-D-3619HEART-W1-1-013018
Operator ID: JBH ALS Bottle#: 29 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (M)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07023.d
 Lims ID: 280-105950-B-5-A
 Client ID: FAY-D-3619HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:21:42 ALS Bottle#: 29 Worklist Smp#: 23
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-5-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:03 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:21:23

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.0	100.38

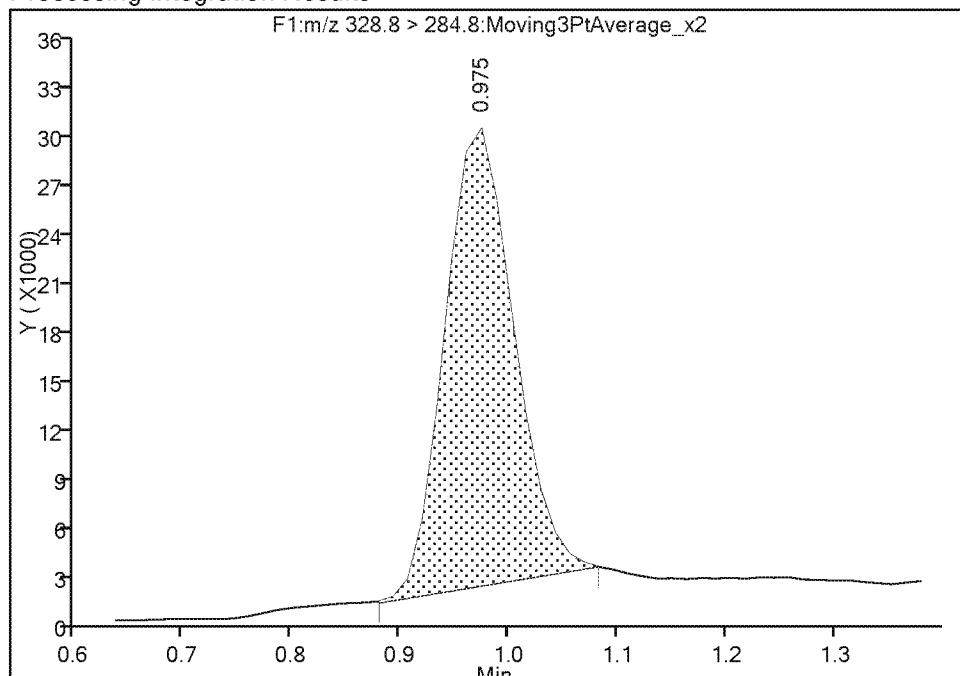
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07023.d
 Injection Date: 07-Feb-2018 09:21:42 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-B-5-A Lab Sample ID: 280-105950-5
 Client ID: FAY-D-3619HEART-W1-1-013018
 Operator ID: JBH ALS Bottle#: 29 Worklist Smp#: 23
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6
 Signal: 1

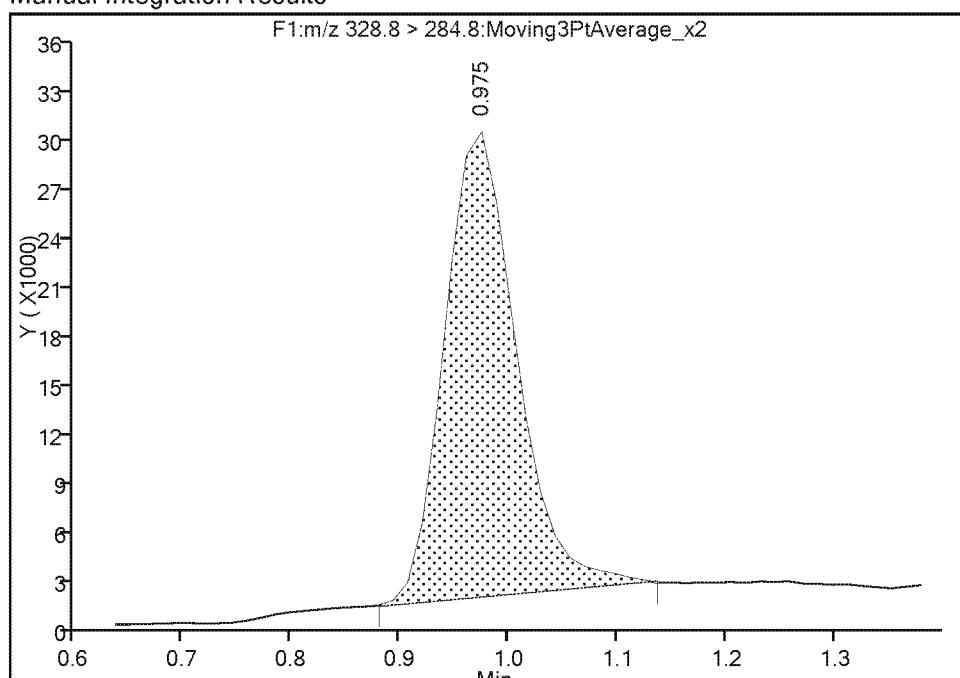
RT: 0.97
 Area: 121520
 Amount: 1.419471
 Amount Units: ug/l

Processing Integration Results



RT: 0.97
 Area: 128166
 Amount: 1.508909
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 07-Feb-2018 11:21:22

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3619HEART-W1-2-0130 Lab Sample ID: 280-105950-6
18 _____

Matrix: Water Lab File ID: hfpo718B07024.d

Analysis Method: 8321A Date Collected: 01/30/2018 09:10

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 241.5 (mL) Date Analyzed: 02/07/2018 09:25

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.021		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	106		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07024.d
 Lims ID: 280-105950-C-6-A
 Client ID: FAY-D-3619HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:25:00 ALS Bottle#: 30 Worklist Smp#: 24
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-6-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:03 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

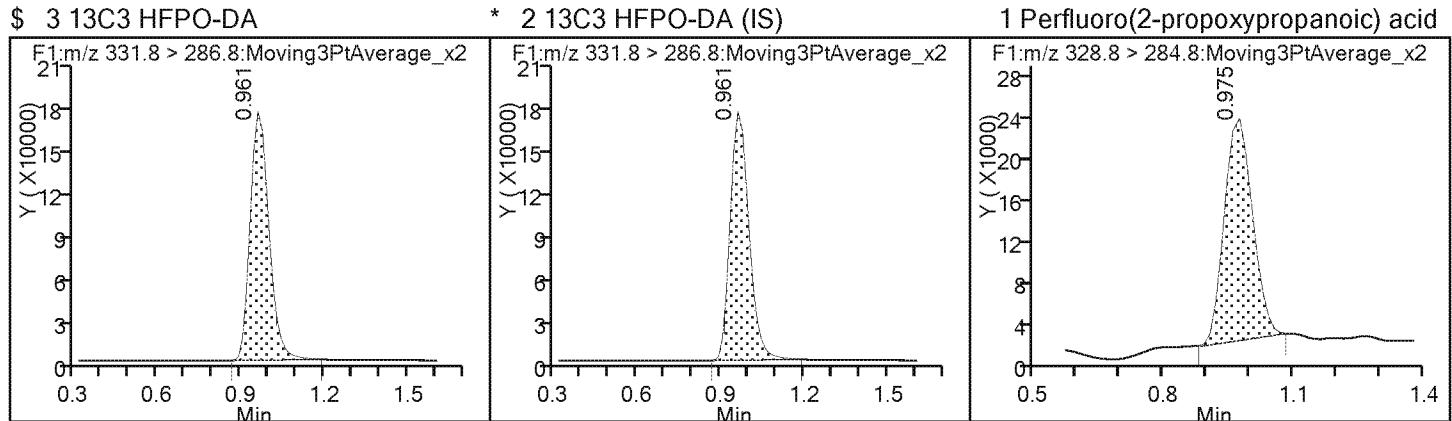
First Level Reviewer: meyera Date: 07-Feb-2018 11:21:26

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 0.961 0.0 1.000 773665 10.6 1387
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 0.961 0.0 1.000 773665 10.0 1387
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 0.988 -0.013 1.000 94839 1.00 18.3

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfp0718B07024.d
Injection Date: 07-Feb-2018 09:25:00 Instrument ID: LC_LCMS7
Lims ID: 280-105950-C-6-A Lab Sample ID: 280-105950-6
Client ID: FAY-D-3619HEART-W1-2-013018
Operator ID: JBH ALS Bottle#: 30 Worklist Smp#: 24
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07024.d
 Lims ID: 280-105950-C-6-A
 Client ID: FAY-D-3619HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:25:00 ALS Bottle#: 30 Worklist Smp#: 24
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-6-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:03 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:21:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.6	105.77

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3615HEART-W1-1-0130 Lab Sample ID: 280-105950-7
18 _____

Matrix: Water Lab File ID: hfpo718B07026.d

Analysis Method: 8321A Date Collected: 01/30/2018 09:34

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 243.4 (mL) Date Analyzed: 02/07/2018 09:31

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	104		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07026.d
 Lims ID: 280-105950-D-7-A
 Client ID: FAY-D-3615HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:31:29 ALS Bottle#: 31 Worklist Smp#: 26
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-7-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:09 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:21:39

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA

331.8 > 286.8 1.002 0.961 0.041 1.000 758886 10.4 1622

* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 1.002 0.961 0.041 758886 10.0 1622

1 Perfluoro(2-propoxypropanoic) acid M

328.8 > 284.8 1.015 0.988 0.027 1.000 44468 0.3631 7.3 M

QC Flag Legend

Review Flags

M - Manually Integrated

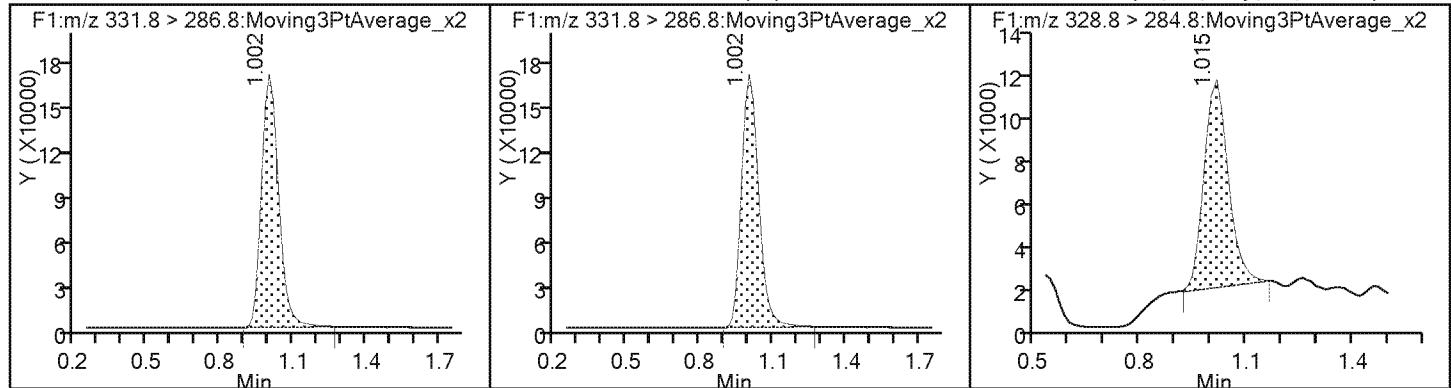
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07026.d
Injection Date: 07-Feb-2018 09:31:29 Instrument ID: LC_LCMS7
Lims ID: 280-105950-D-7-A Lab Sample ID: 280-105950-7
Client ID: FAY-D-3615HEART-W1-1-013018
Operator ID: JBH ALS Bottle#: 31 Worklist Smp#: 26
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (M)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07026.d
 Lims ID: 280-105950-D-7-A
 Client ID: FAY-D-3615HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:31:29 ALS Bottle#: 31 Worklist Smp#: 26
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-7-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:09 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:21:39

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.4	103.75

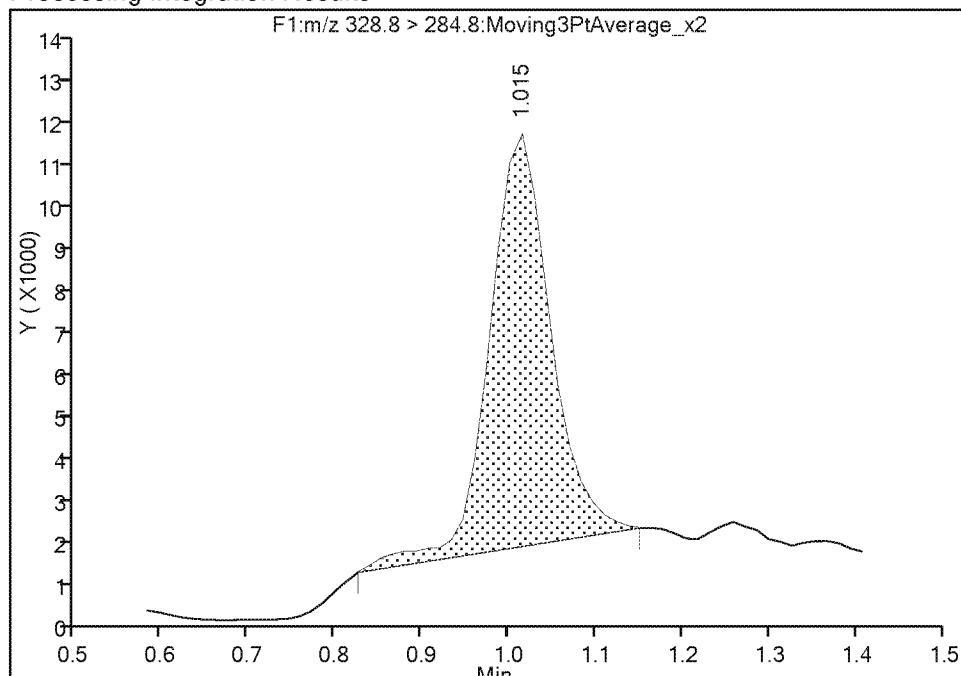
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07026.d
 Injection Date: 07-Feb-2018 09:31:29 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-D-7-A Lab Sample ID: 280-105950-7
 Client ID: FAY-D-3615HEART-W1-1-013018
 Operator ID: JBH ALS Bottle#: 31 Worklist Smp#: 26
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6
 Signal: 1

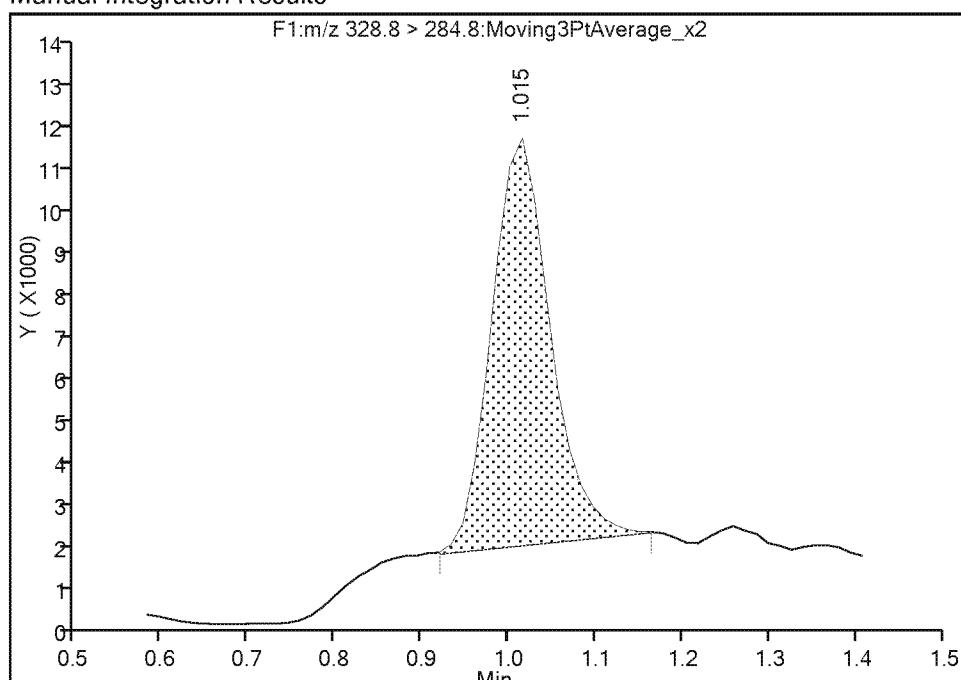
RT: 1.02
 Area: 47006
 Amount: 0.396136
 Amount Units: ug/l

Processing Integration Results



RT: 1.02
 Area: 44468
 Amount: 0.363092
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 07-Feb-2018 11:21:37

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3615HEART-W1-2-0130 Lab Sample ID: 280-105950-8
18 _____

Matrix: Water Lab File ID: hfpo718B07027.d

Analysis Method: 8321A Date Collected: 01/30/2018 09:35

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 237.1 (mL) Date Analyzed: 02/07/2018 09:34

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	102		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07027.d
 Lims ID: 280-105950-D-8-A
 Client ID: FAY-D-3615HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:34:45 ALS Bottle#: 32 Worklist Smp#: 27
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-8-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:09 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

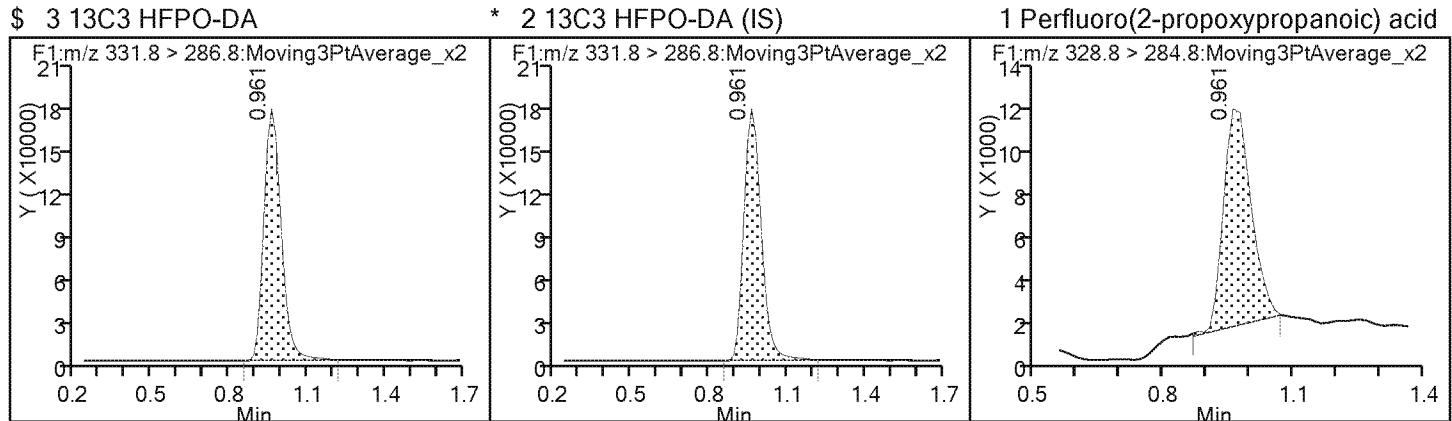
First Level Reviewer: meyera Date: 07-Feb-2018 11:21:49

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 0.961 0.0 1.000 747423 10.2 1521
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 0.961 0.0 1.000 747423 10.0 1521
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.961 0.988 -0.027 1.000 42151 0.3413 9.5

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfp0718B07027.d
Injection Date: 07-Feb-2018 09:34:45 Instrument ID: LC_LCMS7
Lims ID: 280-105950-D-8-A Lab Sample ID: 280-105950-8
Client ID: FAY-D-3615HEART-W1-2-013018
Operator ID: JBH ALS Bottle#: 32 Worklist Smp#: 27
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07027.d
 Lims ID: 280-105950-D-8-A
 Client ID: FAY-D-3615HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:34:45 ALS Bottle#: 32 Worklist Smp#: 27
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-8-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:09 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:21:49

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.2	102.18

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3634HEART-W1-1-0130 Lab Sample ID: 280-105950-9
18 _____

Matrix: Water Lab File ID: hfpo718B07028.d

Analysis Method: 8321A Date Collected: 01/30/2018 10:02

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 245.4 (mL) Date Analyzed: 02/07/2018 09:38

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	103		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07028.d
 Lims ID: 280-105950-D-9-A
 Client ID: FAY-D-3634HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:38:00 ALS Bottle#: 33 Worklist Smp#: 28
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-9-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:09 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:22:02

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA								
331.8 > 286.8	0.961	0.961	0.0	1.000	754392	10.3	1445	
* 2 13C3 HFPO-DA (IS)								
331.8 > 286.8	0.961	0.961	0.0		754392	10.0	1445	
1 Perfluoro(2-propoxypropanoic) acid							M	
328.8 > 284.8	0.961	0.988	-0.027	1.000	11050	-0.0711	2.1	M

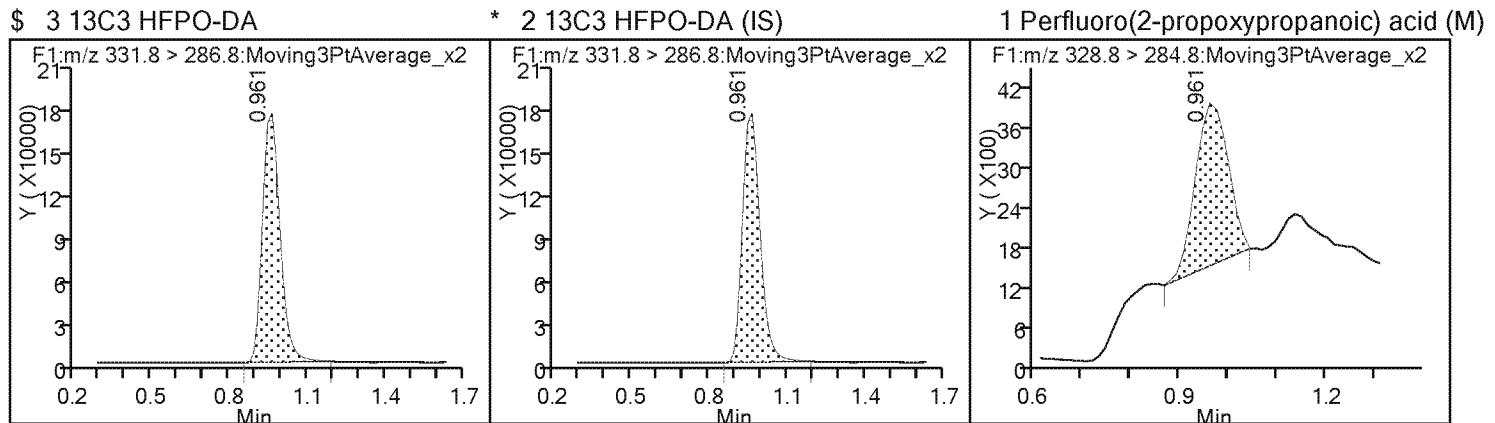
QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07028.d
 Injection Date: 07-Feb-2018 09:38:00 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-D-9-A Lab Sample ID: 280-105950-9
 Client ID: FAY-D-3634HEART-W1-1-013018
 Operator ID: JBH ALS Bottle#: 33 Worklist Smp#: 28
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07028.d
 Lims ID: 280-105950-D-9-A
 Client ID: FAY-D-3634HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:38:00 ALS Bottle#: 33 Worklist Smp#: 28
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-9-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:09 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:22:02

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.3	103.14

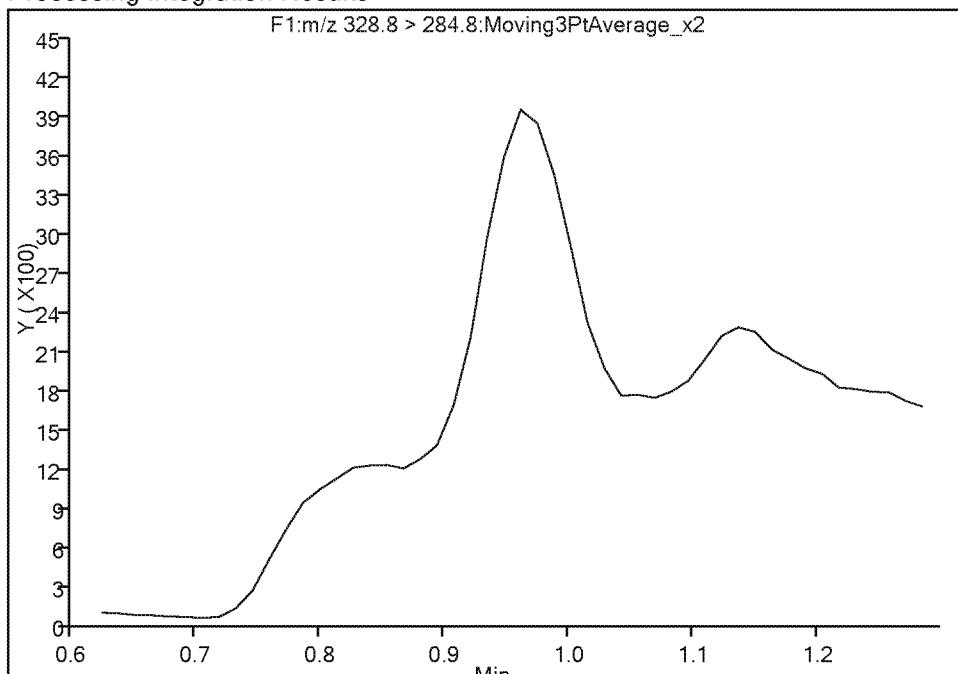
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07028.d
 Injection Date: 07-Feb-2018 09:38:00 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-D-9-A Lab Sample ID: 280-105950-9
 Client ID: FAY-D-3634HEART-W1-1-013018
 Operator ID: JBH ALS Bottle#: 33 Worklist Smp#: 28
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6
 Signal: 1

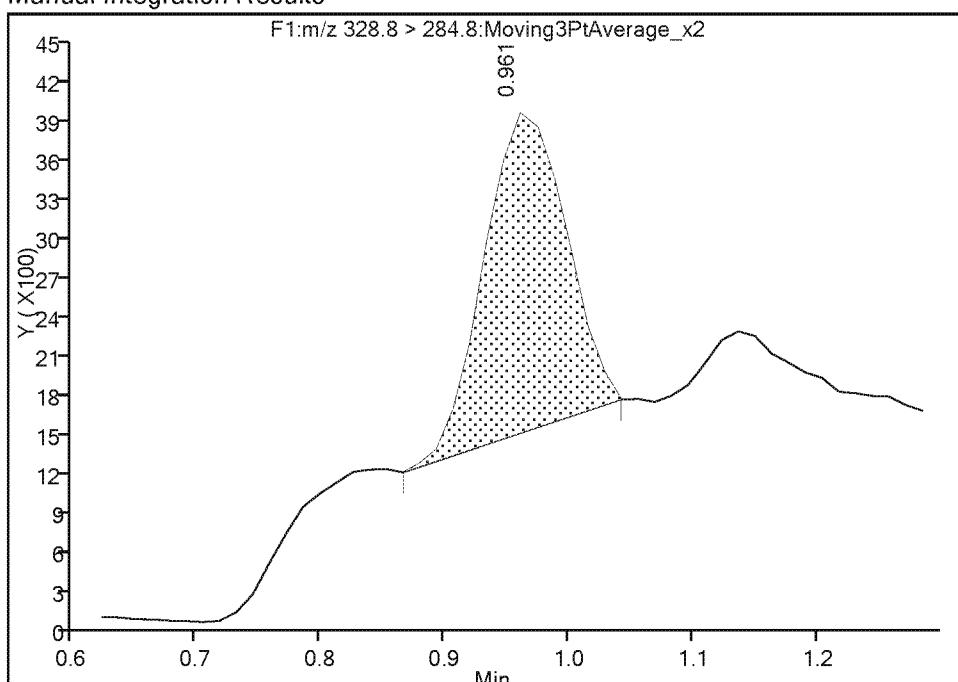
Not Detected
 Expected RT: 0.99

Processing Integration Results



RT: 0.96
 Area: 11050
 Amount: -0.071144
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 07-Feb-2018 11:21:58

Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3634HEART-W1-2-0130 Lab Sample ID: 280-105950-10
18 _____

Matrix: Water Lab File ID: hfpo718B07029.d

Analysis Method: 8321A Date Collected: 01/30/2018 10:03

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 244.8 (mL) Date Analyzed: 02/07/2018 09:41

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	104		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07029.d
 Lims ID: 280-105950-D-10-A
 Client ID: FAY-D-3634HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:41:16 ALS Bottle#: 34 Worklist Smp#: 29
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-10-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:09 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:22:14

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA

331.8 > 286.8 0.947 0.961 -0.014 1.000 757478 10.4 1472

* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 0.947 0.961 -0.014 757478 10.0 1472

1 Perfluoro(2-propoxypropanoic) acid M

328.8 > 284.8 0.961 0.988 -0.027 1.000 12276 -0.0557 2.2 M

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07029.d

Injection Date: 07-Feb-2018 09:41:16 Instrument ID: LC_LCMS7

Lims ID: 280-105950-D-10-A Lab Sample ID: 280-105950-10

Client ID: FAY-D-3634HEART-W1-2-013018

Operator ID: JBH ALS Bottle#: 34 Worklist Smp#: 29

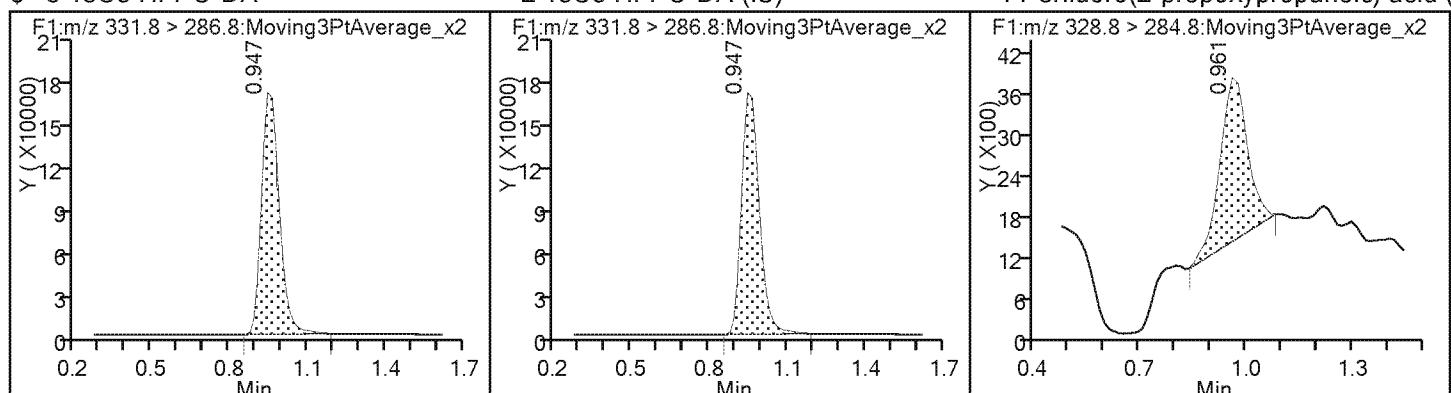
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (M)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07029.d
 Lims ID: 280-105950-D-10-A
 Client ID: FAY-D-3634HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:41:16 ALS Bottle#: 34 Worklist Smp#: 29
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-10-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:09 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:22:14

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.4	103.56

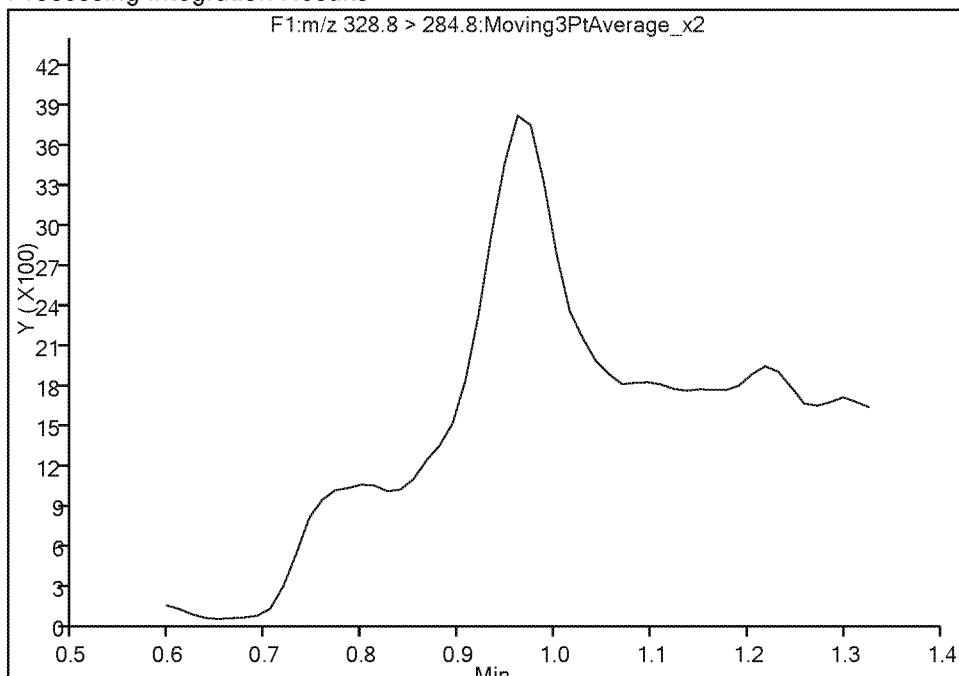
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07029.d
 Injection Date: 07-Feb-2018 09:41:16 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-D-10-A Lab Sample ID: 280-105950-10
 Client ID: FAY-D-3634HEART-W1-2-013018
 Operator ID: JBH ALS Bottle#: 34 Worklist Smp#: 29
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6
 Signal: 1

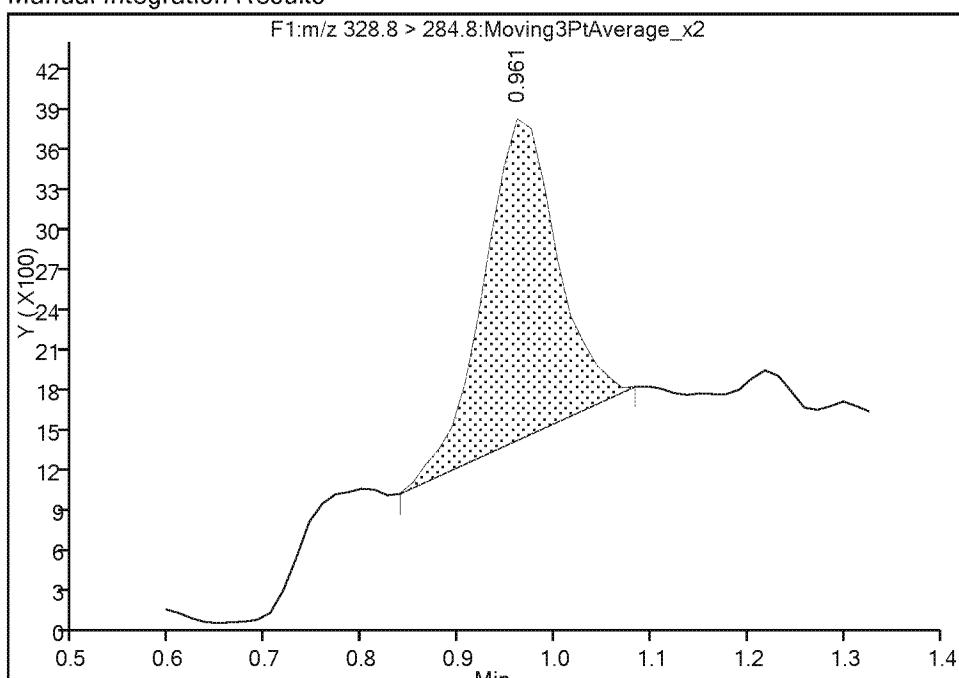
Not Detected
 Expected RT: 0.99

Processing Integration Results



RT: 0.96
 Area: 12276
 Amount: -0.055742
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 07-Feb-2018 11:22:12

Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-FB-013018 Lab Sample ID: 280-105950-11

Matrix: Water Lab File ID: hfpo718B07030.d

Analysis Method: 8321A Date Collected: 01/30/2018 13:00

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 253.5 (mL) Date Analyzed: 02/07/2018 09:44

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	105		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07030.d
 Lims ID: 280-105950-D-11-A
 Client ID: FAY-D-FB-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:44:32 ALS Bottle#: 35 Worklist Smp#: 30
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-11-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:09 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:22:19

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.947 0.961 -0.014 1.000 770498 10.5 1850
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.947 0.961 -0.014 770498 10.0 1850

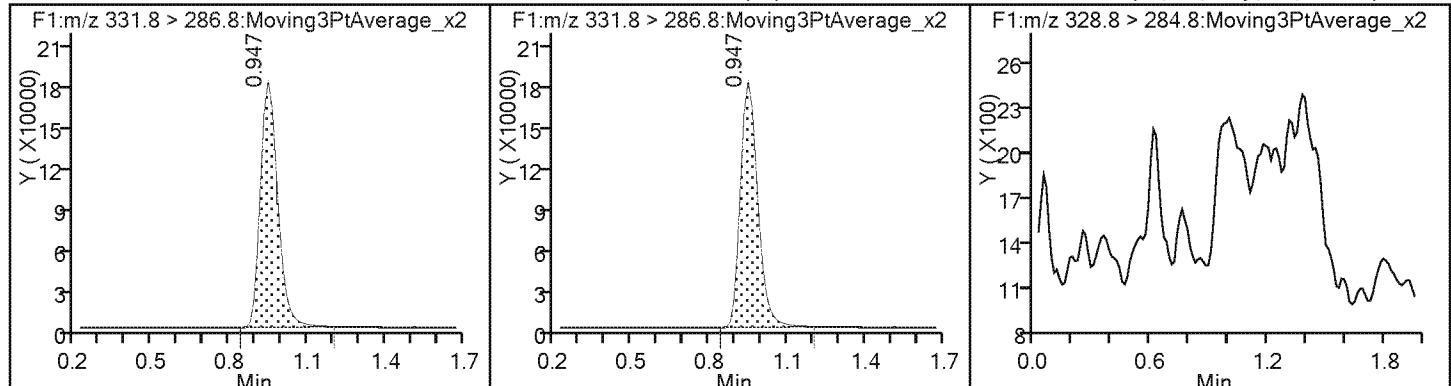
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfp0718B07030.d
Injection Date: 07-Feb-2018 09:44:32 Instrument ID: LC_LCMS7
Lims ID: 280-105950-D-11-A Lab Sample ID: 280-105950-11
Client ID: FAY-D-FB-013018
Operator ID: JBH ALS Bottle#: 35 Worklist Smp#: 30
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (ND)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07030.d
 Lims ID: 280-105950-D-11-A
 Client ID: FAY-D-FB-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:44:32 ALS Bottle#: 35 Worklist Smp#: 30
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-11-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:09 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:22:19

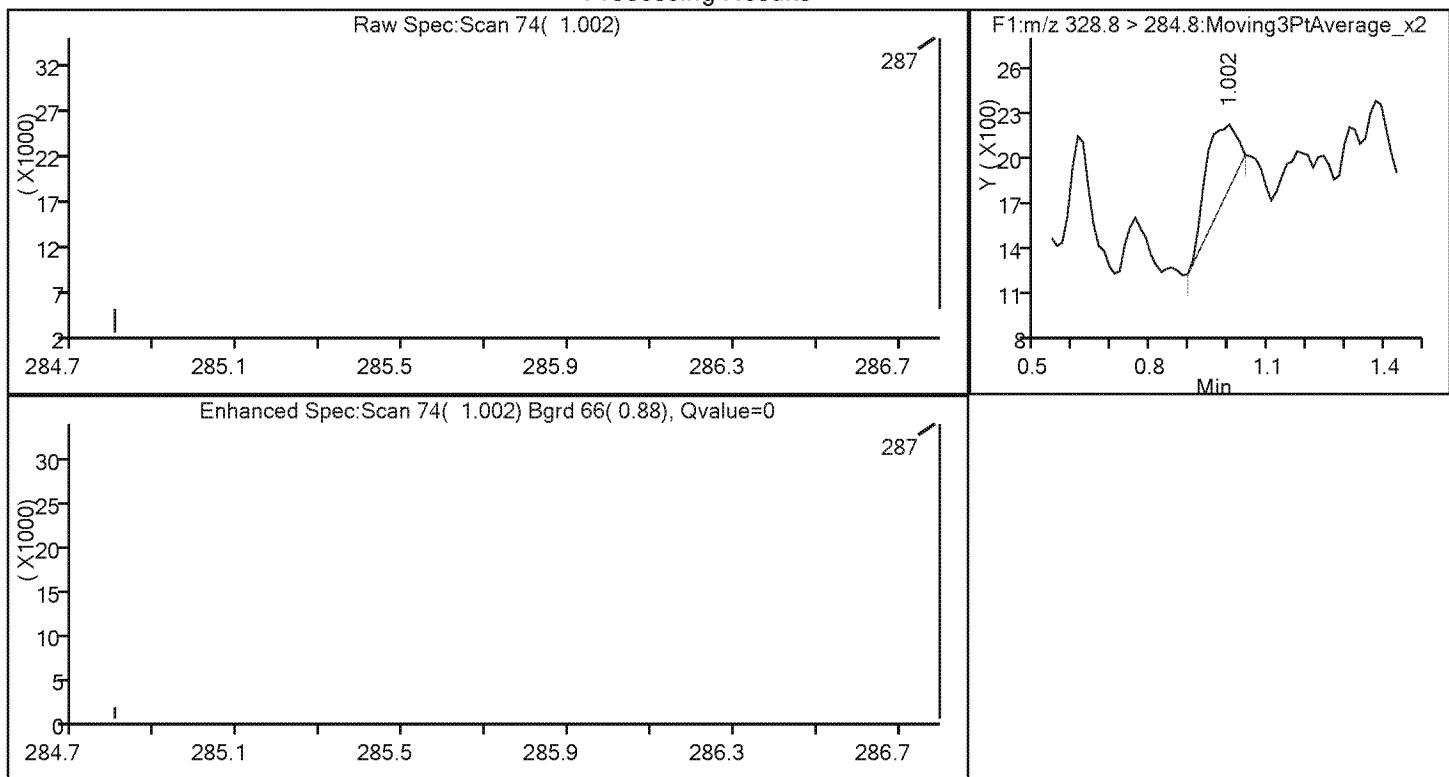
Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.5	105.34

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07030.d
 Injection Date: 07-Feb-2018 09:44:32 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-D-11-A Lab Sample ID: 280-105950-11
 Client ID: FAY-D-FB-013018
 Operator ID: JBH ALS Bottle#: 35 Worklist Smp#: 30
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Processing Results



RT	Mass	Response	Amount
1.00	284.80	2759	-0.180489

Reviewer: meyera, 07-Feb-2018 11:22:19

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-46MEDOW-W1-1-013018 Lab Sample ID: 280-105950-12

Matrix: Water Lab File ID: hfpo718B07031.d

Analysis Method: 8321A Date Collected: 01/30/2018 08:30

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 245 (mL) Date Analyzed: 02/07/2018 09:47

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	112		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07031.d
 Lims ID: 280-105950-D-12-A
 Client ID: FAY-D-46MEDOW-W1-1-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:47:47 ALS Bottle#: 36 Worklist Smp#: 31
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-12-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:09 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

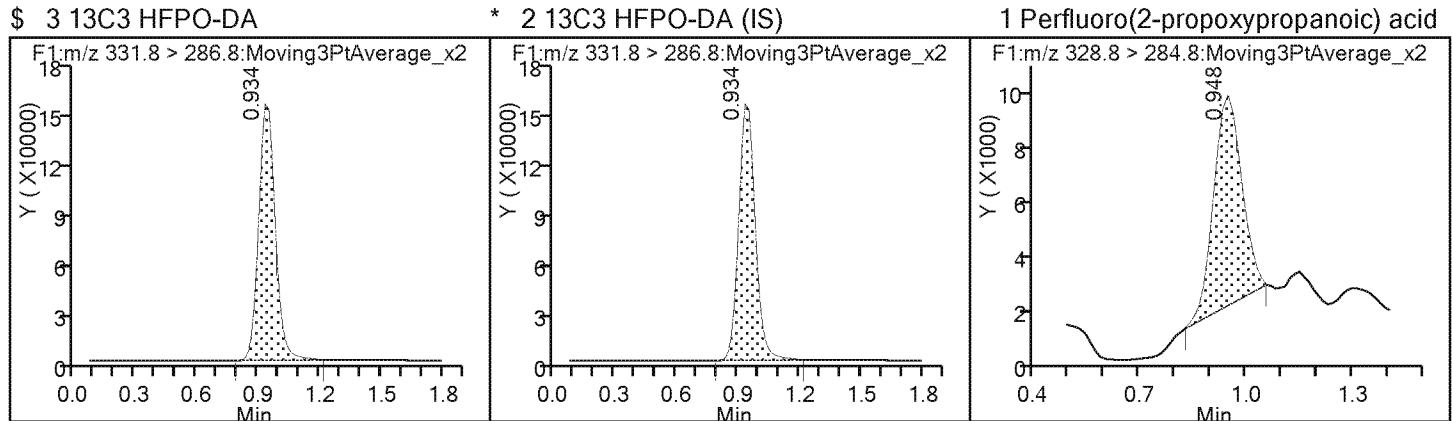
First Level Reviewer: meyera Date: 07-Feb-2018 11:22:22

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.934 0.961 -0.027 1.000 820459 11.2 1336
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.934 0.961 -0.027 1.000 820459 10.0 1336
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.948 0.988 -0.040 1.000 41171 0.2799 5.9

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07031.d
Injection Date: 07-Feb-2018 09:47:47 Instrument ID: LC_LCMS7
Lims ID: 280-105950-D-12-A Lab Sample ID: 280-105950-12
Client ID: FAY-D-46MEDOW-W1-1-013018
Operator ID: JBH ALS Bottle#: 36 Worklist Smp#: 31
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07031.d
 Lims ID: 280-105950-D-12-A
 Client ID: FAY-D-46MEDOW-W1-1-013018
 Sample Type: Client
 Inject. Date: 07-Feb-2018 09:47:47 ALS Bottle#: 36 Worklist Smp#: 31
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-12-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:09 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:22:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.2	112.17

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-196UPTON-W1-1-01301 Lab Sample ID: 280-105950-13
8

Matrix: Water Lab File ID: hfpo718B08052.d

Analysis Method: 8321A Date Collected: 01/30/2018 08:58

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 252.9 (mL) Date Analyzed: 02/08/2018 14:03

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	112		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08052.d
 Lims ID: 280-105950-C-13-A
 Client ID: FAY-D-196UPTON W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:03:56 ALS Bottle#: 18 Worklist Smp#: 21
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-13-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

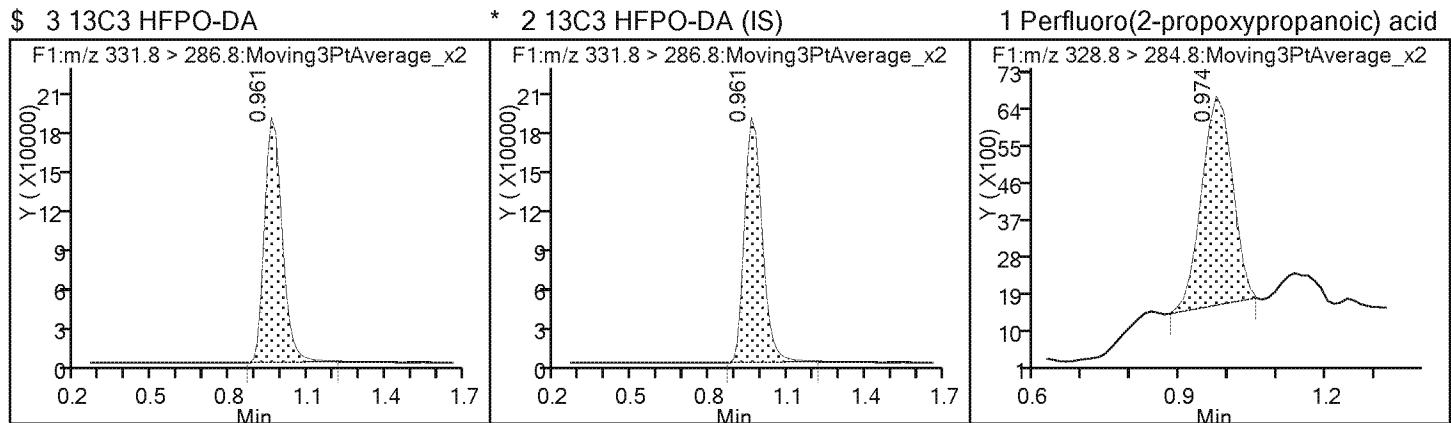
First Level Reviewer: meyera Date: 08-Feb-2018 15:20:58

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 838845 11.2 1407
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 838845 10.0 1407
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.974 1.056 -0.082 1.000 21859 0.2110 4.2

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08052.d
Injection Date: 08-Feb-2018 14:03:56 Instrument ID: LC_LCMS7
Lims ID: 280-105950-C-13-A Lab Sample ID: 280-105950-13
Client ID: FAY-D-196UPTON W1-1-013018
Operator ID: JBH ALS Bottle#: 18 Worklist Smp#: 21
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08052.d
 Lims ID: 280-105950-C-13-A
 Client ID: FAY-D-196UPTON W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:03:56 ALS Bottle#: 18 Worklist Smp#: 21
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-13-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.2	112.36

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-170MEDOW-W1-1-01301 Lab Sample ID: 280-105950-14
8

Matrix: Water Lab File ID: hfpo718B08053.d

Analysis Method: 8321A Date Collected: 01/30/2018 09:17

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 255.3 (mL) Date Analyzed: 02/08/2018 14:07

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.021		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	115		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08053.d
 Lims ID: 280-105950-C-14-A
 Client ID: FAY-D-170MEDOW-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:07:11 ALS Bottle#: 19 Worklist Smp#: 22
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-14-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:19

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 856854 11.5 1314
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 856854 10.0 1314
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 1.056 -0.081 1.000 101856 1.08 17.0

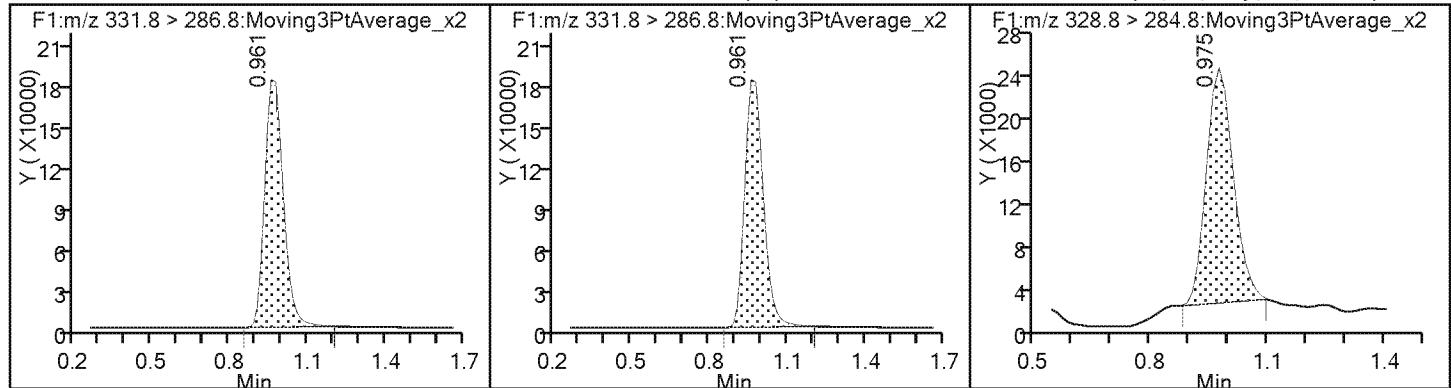
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08053.d
Injection Date: 08-Feb-2018 14:07:11 Instrument ID: LC_LCMS7
Lims ID: 280-105950-C-14-A Lab Sample ID: 280-105950-14
Client ID: FAY-D-170MEDOW-W1-1-013018
Operator ID: JBH ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08053.d
 Lims ID: 280-105950-C-14-A
 Client ID: FAY-D-170MEDOW-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:07:11 ALS Bottle#: 19 Worklist Smp#: 22
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-14-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:19

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.5	114.77

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-170MEDOW-W1-1-01301 Lab Sample ID: 280-105950-15
8-D

Matrix: Water Lab File ID: hfpo718B08057.d

Analysis Method: 8321A Date Collected: 01/30/2018 09:17

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 229.9 (mL) Date Analyzed: 02/08/2018 14:20

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.021		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	111		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08057.d
 Lims ID: 280-105950-C-15-A
 Client ID: FAY-D-170MEDOW-W1-1-013018-D
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:20:10 ALS Bottle#: 22 Worklist Smp#: 26
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-15-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

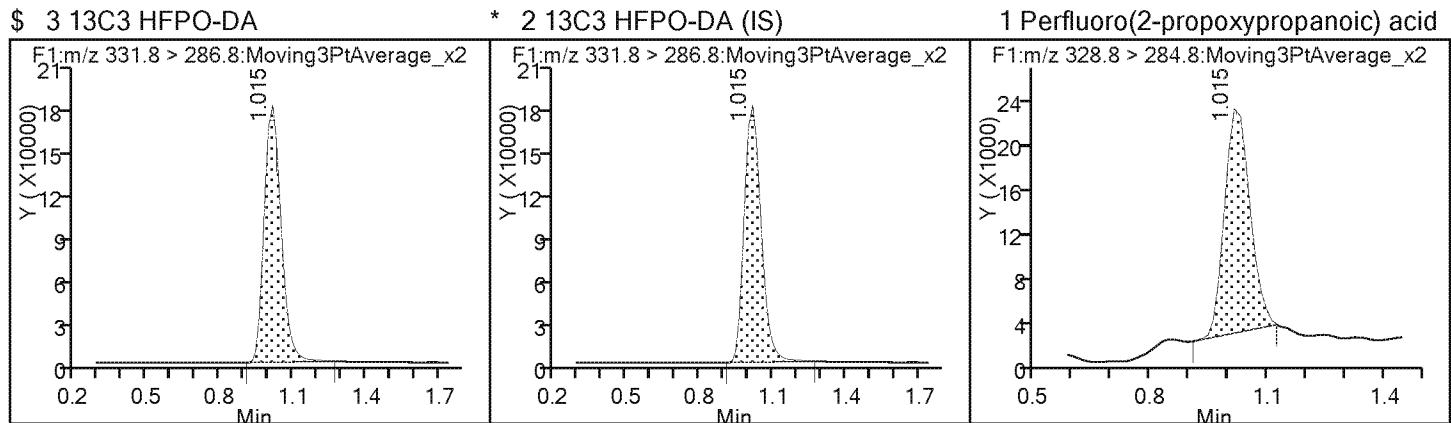
First Level Reviewer: meyera Date: 08-Feb-2018 15:22:31

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.015 1.045 -0.030 1.000 826229 11.1 1324
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.015 1.045 -0.030 1.000 826229 10.0 1324
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 1.015 1.056 -0.041 1.000 88676 0.9749 10.8

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08057.d
 Injection Date: 08-Feb-2018 14:20:10 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-C-15-A Lab Sample ID: 280-105950-15
 Client ID: FAY-D-170MEDOW-W1-1-013018-D
 Operator ID: JBH ALS Bottle#: 22 Worklist Smp#: 26
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08057.d
 Lims ID: 280-105950-C-15-A
 Client ID: FAY-D-170MEDOW-W1-1-013018-D
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:20:10 ALS Bottle#: 22 Worklist Smp#: 26
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-15-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:31

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.1	110.67

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-102UPTON-W1-1-01301 Lab Sample ID: 280-105950-16
8 _____

Matrix: Water Lab File ID: hfpo718B08058.d

Analysis Method: 8321A Date Collected: 01/30/2018 09:52

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 248.5 (mL) Date Analyzed: 02/08/2018 14:23

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.022		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	114		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08058.d
 Lims ID: 280-105950-C-16-A
 Client ID: FAY-D-102UPTON-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:23:25 ALS Bottle#: 23 Worklist Smp#: 27
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-16-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

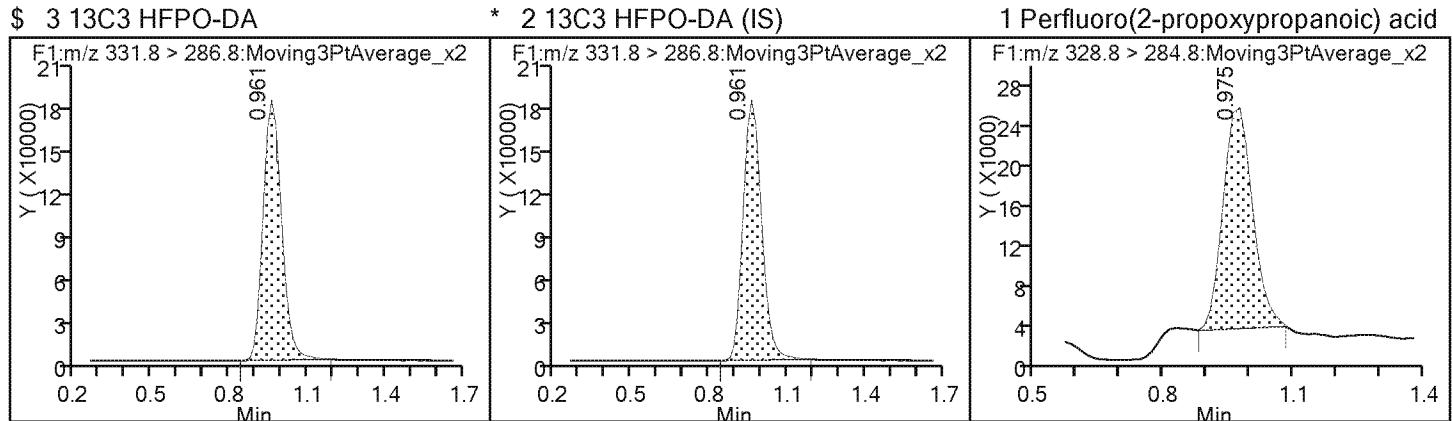
First Level Reviewer: meyera Date: 08-Feb-2018 15:22:33

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 847726 11.4 1258
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 847726 10.0 1258
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 1.056 -0.081 1.000 100990 1.09 13.1

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08058.d
Injection Date: 08-Feb-2018 14:23:25 Instrument ID: LC_LCMS7
Lims ID: 280-105950-C-16-A Lab Sample ID: 280-105950-16
Client ID: FAY-D-102UPTON-W1-1-013018
Operator ID: JBH ALS Bottle#: 23 Worklist Smp#: 27
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08058.d
 Lims ID: 280-105950-C-16-A
 Client ID: FAY-D-102UPTON-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:23:25 ALS Bottle#: 23 Worklist Smp#: 27
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-16-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.4	113.55

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-121HILLT-W1-1-01301 Lab Sample ID: 280-105950-17
8 _____

Matrix: Water Lab File ID: hfpo718B08059.d

Analysis Method: 8321A Date Collected: 01/30/2018 10:15

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 254.8 (mL) Date Analyzed: 02/08/2018 14:26

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.12		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	112		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08059.d
 Lims ID: 280-105950-A-17-A
 Client ID: FAY-D-121HILLT-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:26:40 ALS Bottle#: 24 Worklist Smp#: 28
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-17-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:35

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.975 1.045 -0.070 1.000 835271 11.2 1211
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.975 1.045 -0.070 1.000 835271 10.0 1211
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.988 1.056 -0.068 1.000 563680 6.31 82.3

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08059.d

Injection Date: 08-Feb-2018 14:26:40

Instrument ID: LC_LCMS7

Lims ID: 280-105950-A-17-A

Lab Sample ID: 280-105950-17

Client ID: FAY-D-121HILLT-W1-1-013018

Operator ID: JBH

ALS Bottle#: 24 Worklist Smp#: 28

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

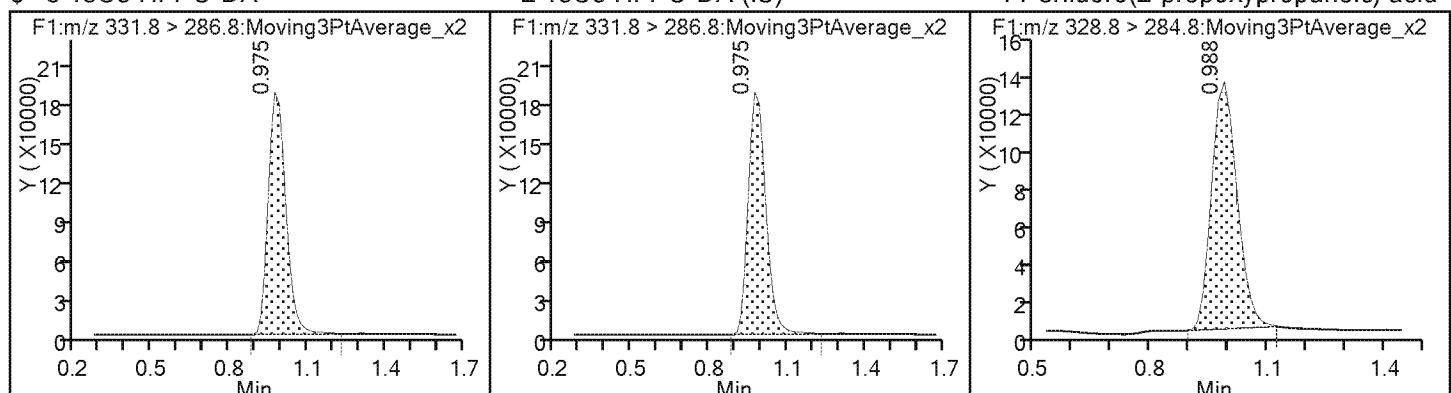
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08059.d
 Lims ID: 280-105950-A-17-A
 Client ID: FAY-D-121HILLT-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:26:40 ALS Bottle#: 24 Worklist Smp#: 28
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-17-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:35

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.2	111.88

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-99DRYES-W1-1-013018 Lab Sample ID: 280-105950-18

Matrix: Water Lab File ID: hfpo718B08060.d

Analysis Method: 8321A Date Collected: 01/30/2018 11:16

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 248.6 (mL) Date Analyzed: 02/08/2018 14:29

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.050		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	110		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08060.d
 Lims ID: 280-105950-A-18-A
 Client ID: FAY-D-99DRYES-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:29:55 ALS Bottle#: 25 Worklist Smp#: 29
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-18-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

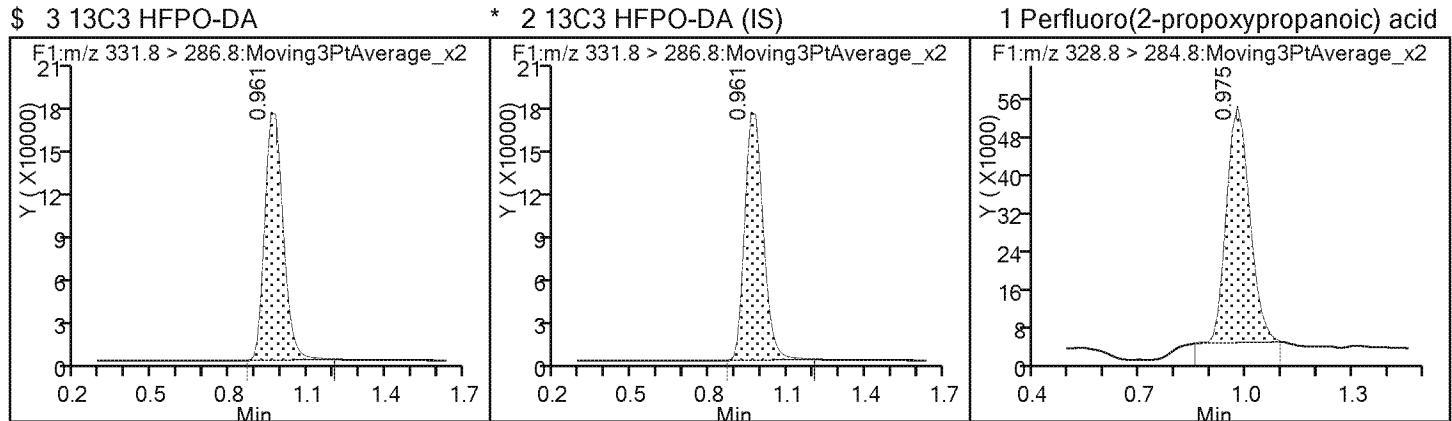
First Level Reviewer: meyera Date: 08-Feb-2018 15:22:37

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 819291 11.0 1183
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 819291 10.0 1183
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 1.056 -0.081 1.000 221493 2.51 27.3

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08060.d
Injection Date: 08-Feb-2018 14:29:55 Instrument ID: LC_LCMS7
Lims ID: 280-105950-A-18-A Lab Sample ID: 280-105950-18
Client ID: FAY-D-99DRYES-W1-1-013018
Operator ID: JBH ALS Bottle#: 25 Worklist Smp#: 29
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08060.d
 Lims ID: 280-105950-A-18-A
 Client ID: FAY-D-99DRYES-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:29:55 ALS Bottle#: 25 Worklist Smp#: 29
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-18-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.0	109.74

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-6110CHKFT-W1-1-0130 Lab Sample ID: 280-105950-19
18

Matrix: Water Lab File ID: hfpo718B08061.d

Analysis Method: 8321A Date Collected: 01/30/2018 11:58

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 250.3 (mL) Date Analyzed: 02/08/2018 14:33

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	109		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08061.d
 Lims ID: 280-105950-B-19-A
 Client ID: FAY-D-6110CHKFT-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:33:11 ALS Bottle#: 26 Worklist Smp#: 30
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-19-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:39

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.975 1.045 -0.070 1.000 815516 10.9 1179
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.975 1.045 -0.070 815516 10.0 1179

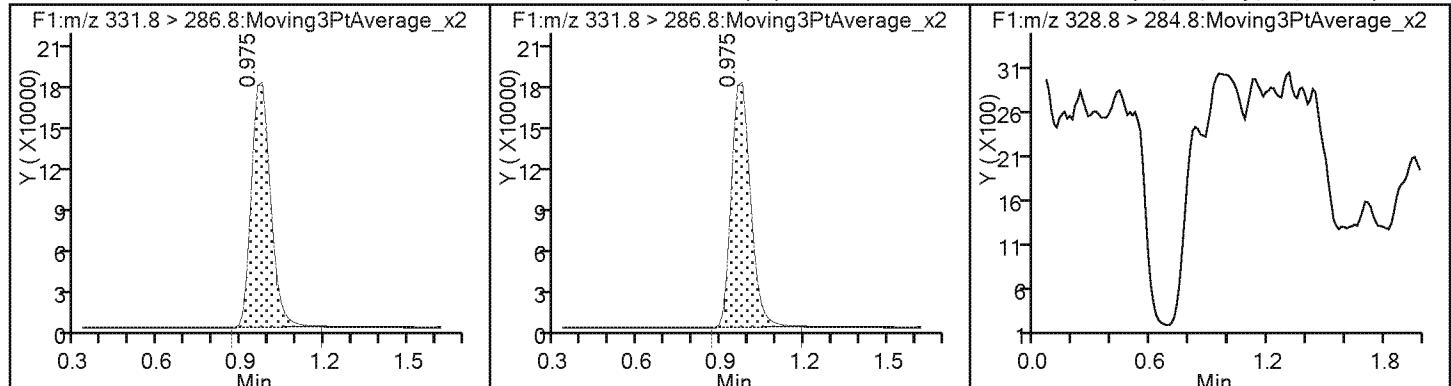
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08061.d
Injection Date: 08-Feb-2018 14:33:11 Instrument ID: LC_LCMS7
Lims ID: 280-105950-B-19-A Lab Sample ID: 280-105950-19
Client ID: FAY-D-6110CHKFT-W1-1-013018
Operator ID: JBH ALS Bottle#: 26 Worklist Smp#: 30
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (ND)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08061.d
 Lims ID: 280-105950-B-19-A
 Client ID: FAY-D-6110CHKFT-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:33:11 ALS Bottle#: 26 Worklist Smp#: 30
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-19-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:39

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.9	109.23

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-6695CHKFT-W1-1-0130 Lab Sample ID: 280-105950-20
18 _____

Matrix: Water Lab File ID: hfpo718B08062.d

Analysis Method: 8321A Date Collected: 01/30/2018 15:20

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 245.5 (mL) Date Analyzed: 02/08/2018 14:36

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.071		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	110		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08062.d
 Lims ID: 280-105950-B-20-A
 Client ID: FAY-D-6695CHKFT-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:36:27 ALS Bottle#: 27 Worklist Smp#: 31
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-20-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

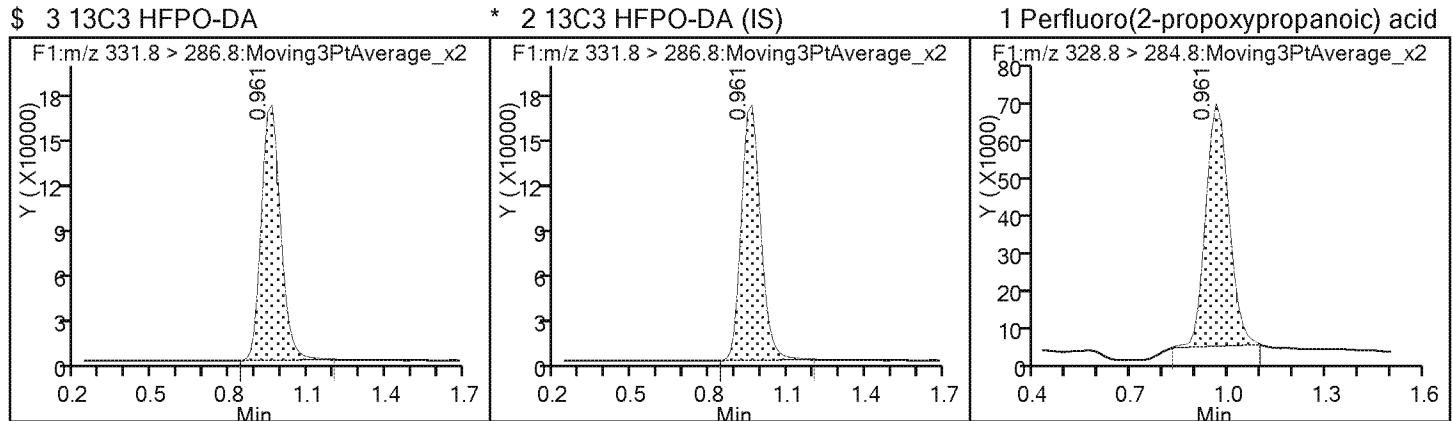
First Level Reviewer: meyera Date: 08-Feb-2018 15:22:41

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 823844 11.0 1261
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 823844 10.0 1261
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.961 1.056 -0.095 1.000 309638 3.50 31.4

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08062.d
Injection Date: 08-Feb-2018 14:36:27 Instrument ID: LC_LCMS7
Lims ID: 280-105950-B-20-A Lab Sample ID: 280-105950-20
Client ID: FAY-D-6695CHKFT-W1-1-013018
Operator ID: JBH ALS Bottle#: 27 Worklist Smp#: 31
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08062.d
 Lims ID: 280-105950-B-20-A
 Client ID: FAY-D-6695CHKFT-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:36:27 ALS Bottle#: 27 Worklist Smp#: 31
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-20-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:41

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.0	110.35

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3662HEART-W1-1-0130 Lab Sample ID: 280-105950-21
18 _____

Matrix: Water Lab File ID: hfpo718B08063.d

Analysis Method: 8321A Date Collected: 01/30/2018 10:31

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 239.3 (mL) Date Analyzed: 02/08/2018 14:39

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	111		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08063.d
 Lims ID: 280-105950-A-21-A
 Client ID: FAY-D-3662HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:39:43 ALS Bottle#: 28 Worklist Smp#: 32
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-21-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:43

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.947 1.045 -0.098 1.000 827463 11.1 1019
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.947 1.045 -0.098 827463 10.0 1019

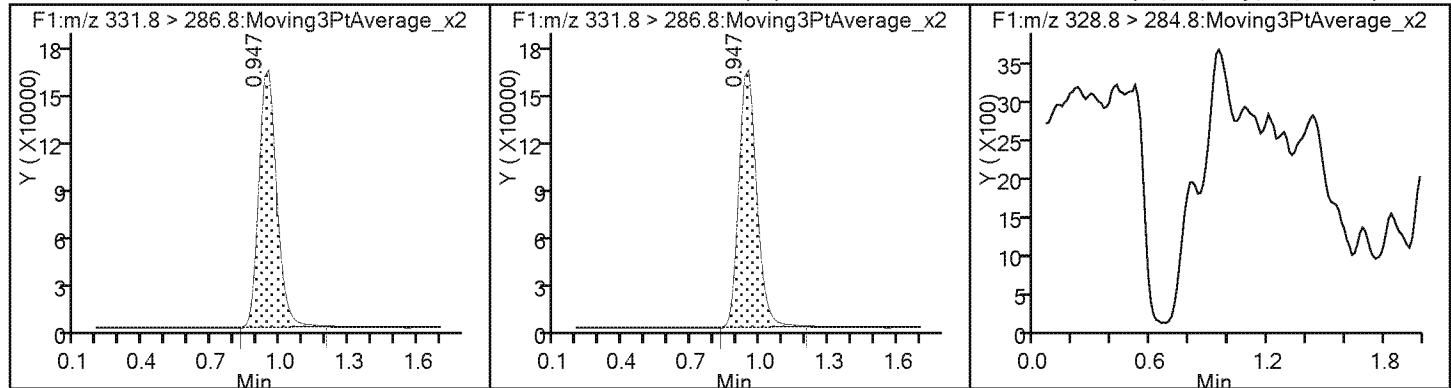
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08063.d
 Injection Date: 08-Feb-2018 14:39:43 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-A-21-A Lab Sample ID: 280-105950-21
 Client ID: FAY-D-3662HEART-W1-1-013018
 Operator ID: JBH ALS Bottle#: 28 Worklist Smp#: 32
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (ND)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08063.d
 Lims ID: 280-105950-A-21-A
 Client ID: FAY-D-3662HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:39:43 ALS Bottle#: 28 Worklist Smp#: 32
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-21-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.1	110.83

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3662HEART-W1-2-0130 Lab Sample ID: 280-105950-22
18 _____

Matrix: Water Lab File ID: hfpo718B08064.d

Analysis Method: 8321A Date Collected: 01/30/2018 10:34

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 252.4 (mL) Date Analyzed: 02/08/2018 14:42

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	105		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08064.d
 Lims ID: 280-105950-A-22-A
 Client ID: FAY-D-3662HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:42:58 ALS Bottle#: 29 Worklist Smp#: 33
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-22-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:45

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 782828 10.5 1578
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 782828 10.0 1578

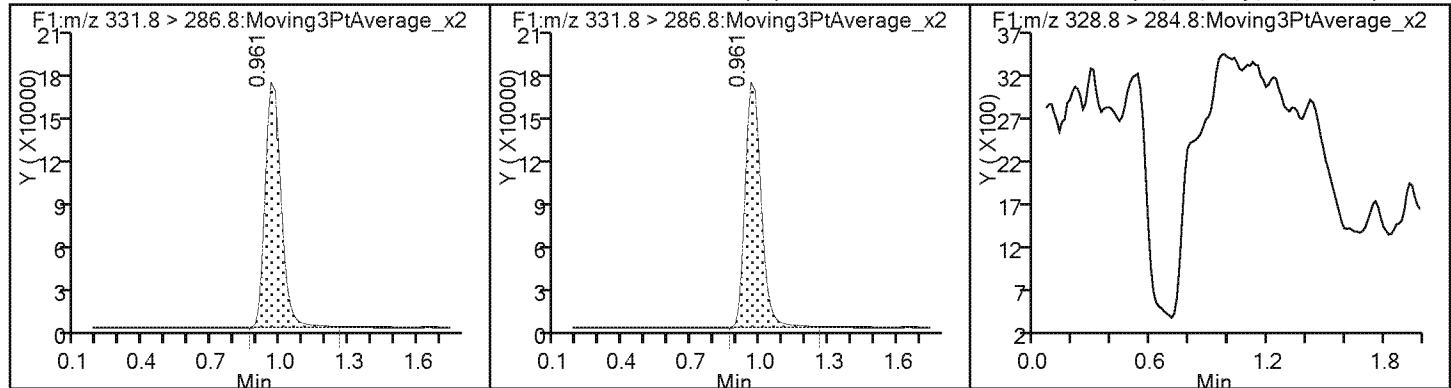
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08064.d
Injection Date: 08-Feb-2018 14:42:58 Instrument ID: LC_LCMS7
Lims ID: 280-105950-A-22-A Lab Sample ID: 280-105950-22
Client ID: FAY-D-3662HEART-W1-2-013018
Operator ID: JBH ALS Bottle#: 29 Worklist Smp#: 33
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (ND)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08064.d
 Lims ID: 280-105950-A-22-A
 Client ID: FAY-D-3662HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:42:58 ALS Bottle#: 29 Worklist Smp#: 33
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-22-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:45

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.5	104.85

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3655HEART-W1-1-0130 Lab Sample ID: 280-105950-23
18 _____

Matrix: Water Lab File ID: hfpo718B08065.d

Analysis Method: 8321A Date Collected: 01/30/2018 10:55

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 254.9 (mL) Date Analyzed: 02/08/2018 14:46

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	114		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08065.d
 Lims ID: 280-105950-A-23-A
 Client ID: FAY-D-3655HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:46:14 ALS Bottle#: 30 Worklist Smp#: 34
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-23-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:47

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA

331.8 > 286.8 0.961 1.045 -0.084 1.000 854553 11.4 1376

* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 0.961 1.045 -0.084 854553 10.0 1376

1 Perfluoro(2-propoxypropanoic) acid M

328.8 > 284.8 0.988 1.056 -0.068 1.000 9841 0.0743 0.9 M

QC Flag Legend

Review Flags

M - Manually Integrated

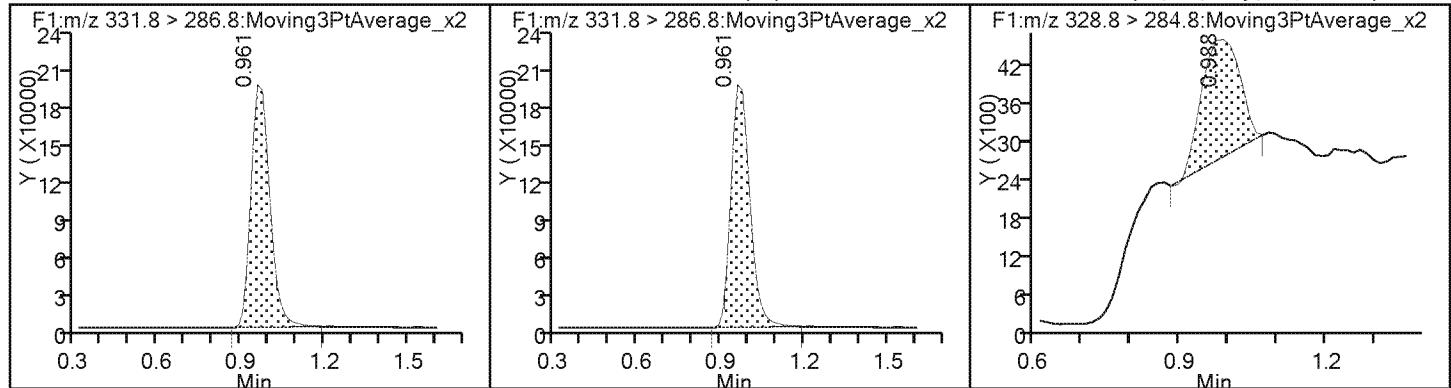
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08065.d
Injection Date: 08-Feb-2018 14:46:14 Instrument ID: LC_LCMS7
Lims ID: 280-105950-A-23-A Lab Sample ID: 280-105950-23
Client ID: FAY-D-3655HEART-W1-1-013018
Operator ID: JBH ALS Bottle#: 30 Worklist Smp#: 34
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (M)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08065.d
 Lims ID: 280-105950-A-23-A
 Client ID: FAY-D-3655HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:46:14 ALS Bottle#: 30 Worklist Smp#: 34
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-23-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:47

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.4	114.46

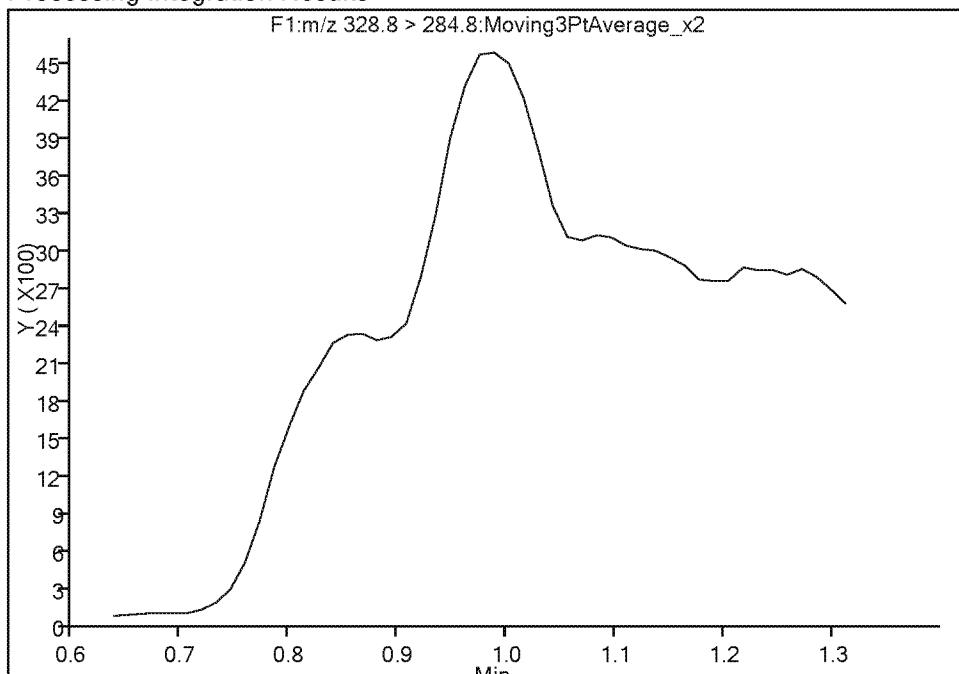
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08065.d
 Injection Date: 08-Feb-2018 14:46:14 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-A-23-A Lab Sample ID: 280-105950-23
 Client ID: FAY-D-3655HEART-W1-1-013018
 Operator ID: JBH ALS Bottle#: 30 Worklist Smp#: 34
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6
 Signal: 1

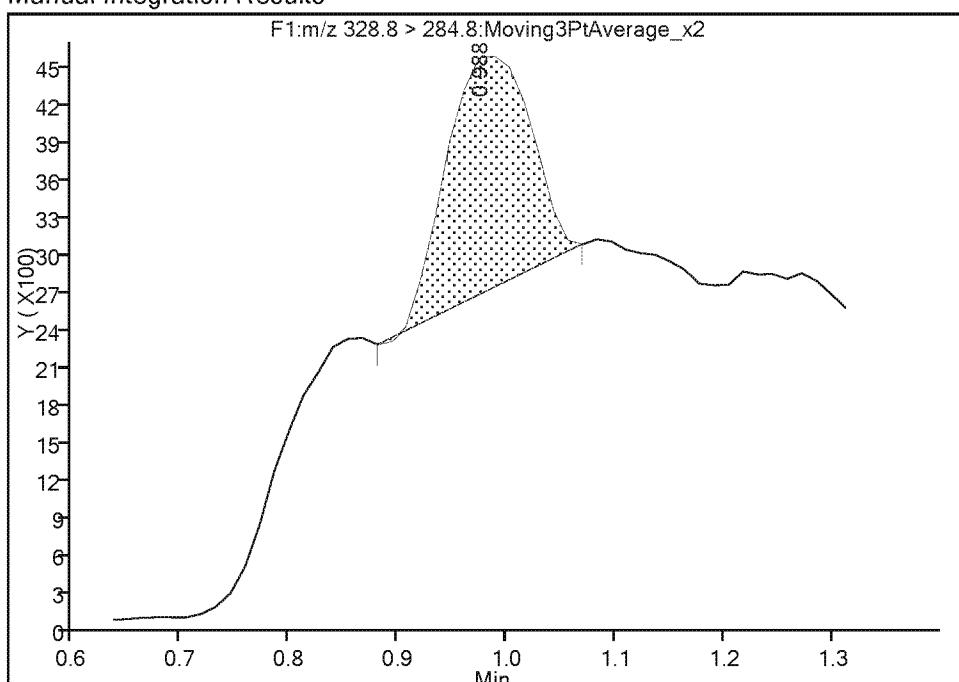
Not Detected
 Expected RT: 1.06

Processing Integration Results



RT: 0.99
 Area: 9841
 Amount: 0.074290
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 08-Feb-2018 15:23:37

Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3655HEART-W1-2-0130 Lab Sample ID: 280-105950-24
18 _____

Matrix: Water Lab File ID: hfpo718B08066.d

Analysis Method: 8321A Date Collected: 01/30/2018 10:56

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 249 (mL) Date Analyzed: 02/08/2018 14:49

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	116		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08066.d
 Lims ID: 280-105950-A-24-A
 Client ID: FAY-D-3655HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:49:30 ALS Bottle#: 31 Worklist Smp#: 35
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-24-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:49

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.975 1.045 -0.070 1.000 864495 11.6 1577
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.975 1.045 -0.070 1.000 864495 10.0 1577
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.988 1.056 -0.068 1.000 18133 0.1632 2.0 M

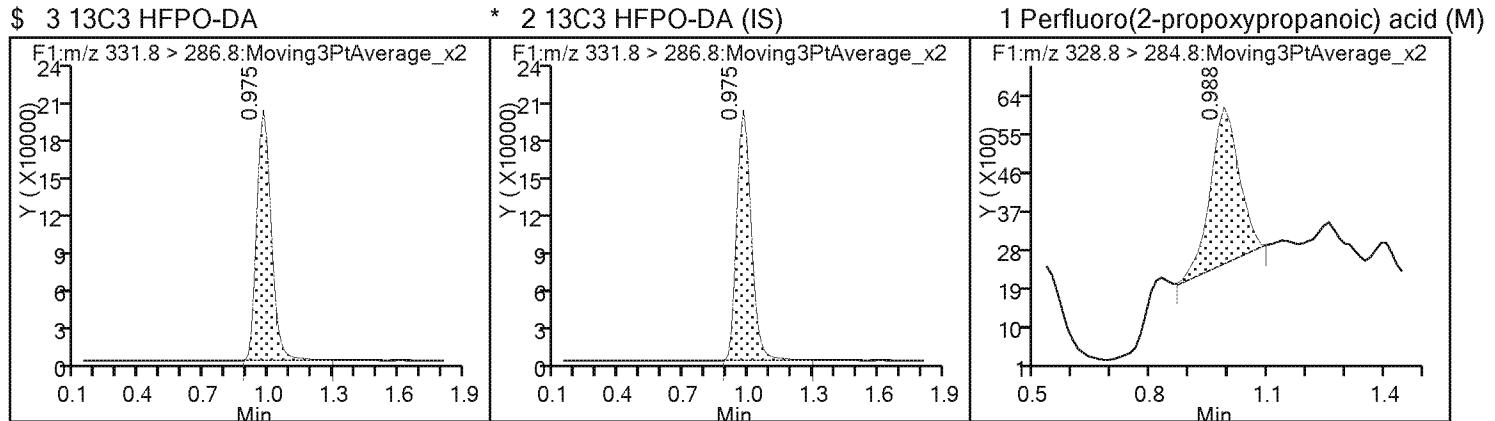
QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08066.d
Injection Date: 08-Feb-2018 14:49:30 Instrument ID: LC_LCMS7
Lims ID: 280-105950-A-24-A Lab Sample ID: 280-105950-24
Client ID: FAY-D-3655HEART-W1-2-013018
Operator ID: JBH ALS Bottle#: 31 Worklist Smp#: 35
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08066.d
 Lims ID: 280-105950-A-24-A
 Client ID: FAY-D-3655HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:49:30 ALS Bottle#: 31 Worklist Smp#: 35
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-24-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:49

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.6	115.79

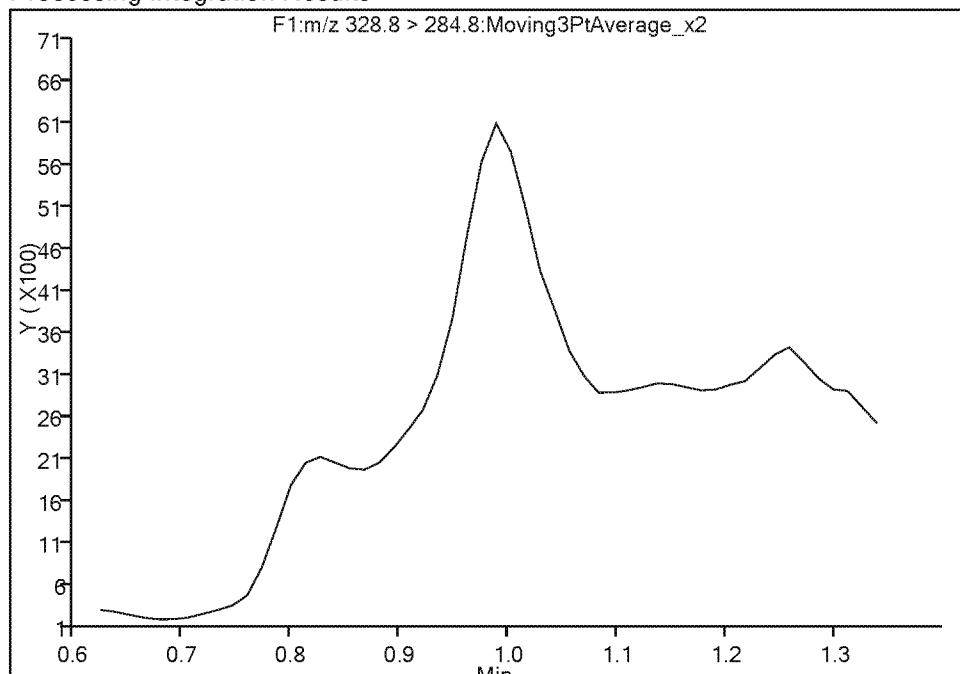
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08066.d
 Injection Date: 08-Feb-2018 14:49:30 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-A-24-A Lab Sample ID: 280-105950-24
 Client ID: FAY-D-3655HEART-W1-2-013018
 Operator ID: JBH ALS Bottle#: 31 Worklist Smp#: 35
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6
 Signal: 1

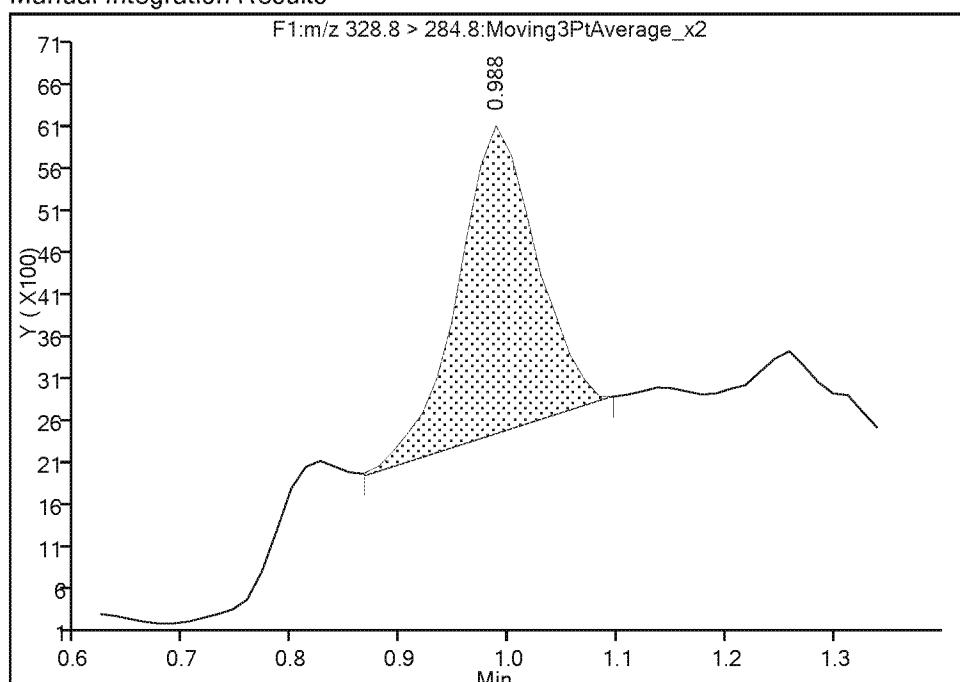
Not Detected
 Expected RT: 1.06

Processing Integration Results



RT: 0.99
 Area: 18133
 Amount: 0.163210
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 08-Feb-2018 15:23:28

Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3720HEART-W1-1-0130 Lab Sample ID: 280-105950-25
18 _____

Matrix: Water Lab File ID: hfpo718B08068.d

Analysis Method: 8321A Date Collected: 01/30/2018 11:25

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 254.2 (mL) Date Analyzed: 02/08/2018 14:56

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.012		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	111		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08068.d
 Lims ID: 280-105950-A-25-A
 Client ID: FAY-D-3720HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:56:00 ALS Bottle#: 32 Worklist Smp#: 37
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-25-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:30 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:56

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.002 1.045 -0.043 1.000 830508 11.1 1092
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.002 1.045 -0.043 1.000 830508 10.0 1092
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 1.002 1.056 -0.054 1.000 57629 0.6183 5.5

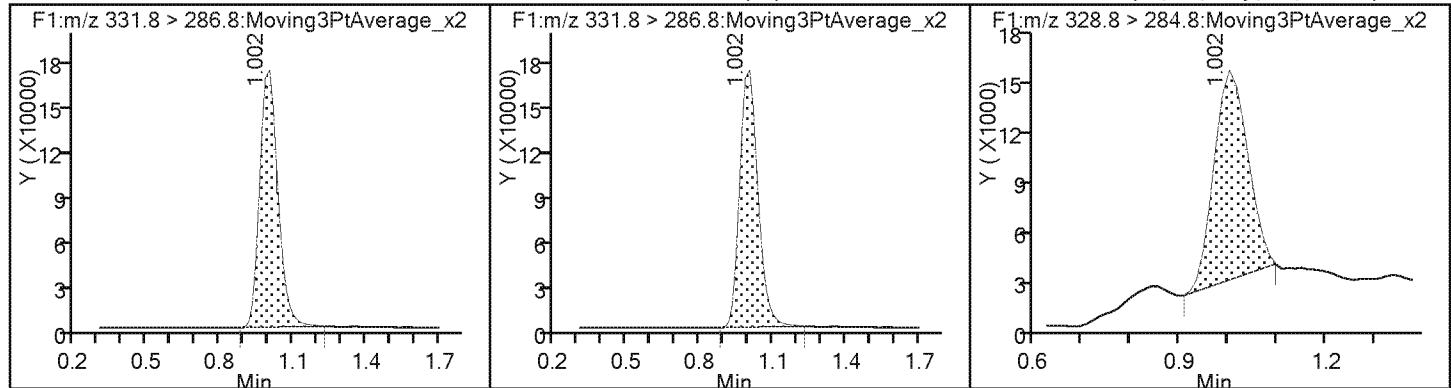
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08068.d
Injection Date: 08-Feb-2018 14:56:00 Instrument ID: LC_LCMS7
Lims ID: 280-105950-A-25-A Lab Sample ID: 280-105950-25
Client ID: FAY-D-3720HEART-W1-1-013018
Operator ID: JBH ALS Bottle#: 32 Worklist Smp#: 37
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08068.d
 Lims ID: 280-105950-A-25-A
 Client ID: FAY-D-3720HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:56:00 ALS Bottle#: 32 Worklist Smp#: 37
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-25-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:30 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:56

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.1	111.24

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3720HEART-W2-1-0130 Lab Sample ID: 280-105950-26
18 _____

Matrix: Water Lab File ID: hfpo718B08069.d

Analysis Method: 8321A Date Collected: 01/30/2018 13:36

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 258 (mL) Date Analyzed: 02/08/2018 14:59

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.016		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	110		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08069.d
 Lims ID: 280-105950-D-26-A
 Client ID: FAY-D-3720HEART-W2-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:59:15 ALS Bottle#: 33 Worklist Smp#: 38
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-26-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:30 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

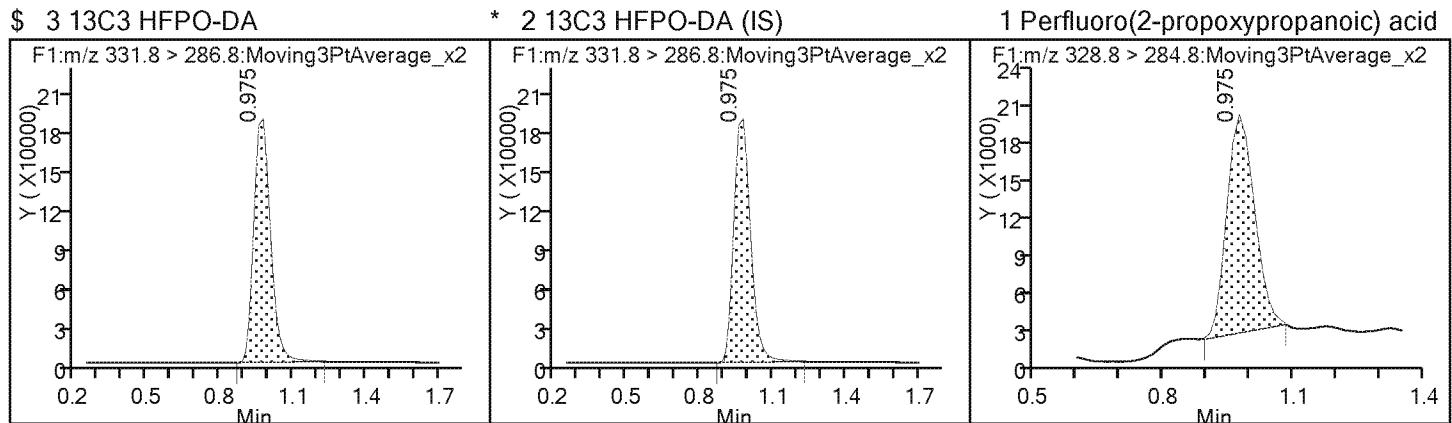
First Level Reviewer: meyera Date: 08-Feb-2018 15:22:58

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.975 1.045 -0.070 1.000 823826 11.0 1671
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.975 1.045 -0.070 1.000 823826 10.0 1671
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 1.056 -0.081 1.000 75488 0.8274 10.1

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08069.d
 Injection Date: 08-Feb-2018 14:59:15 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-D-26-A Lab Sample ID: 280-105950-26
 Client ID: FAY-D-3720HEART-W2-1-013018
 Operator ID: JBH ALS Bottle#: 33 Worklist Smp#: 38
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08069.d
 Lims ID: 280-105950-D-26-A
 Client ID: FAY-D-3720HEART-W2-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 14:59:15 ALS Bottle#: 33 Worklist Smp#: 38
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-26-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:30 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.0	110.34

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3721HEART-W1-1-0130 Lab Sample ID: 280-105950-27
18 _____

Matrix: Water Lab File ID: hfpo718B08070.d

Analysis Method: 8321A Date Collected: 01/30/2018 13:46

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 255.9 (mL) Date Analyzed: 02/08/2018 15:02

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.014		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	111		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08070.d
 Lims ID: 280-105950-B-27-A
 Client ID: FAY-D-3721HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 15:02:31 ALS Bottle#: 34 Worklist Smp#: 39
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-27-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:30 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

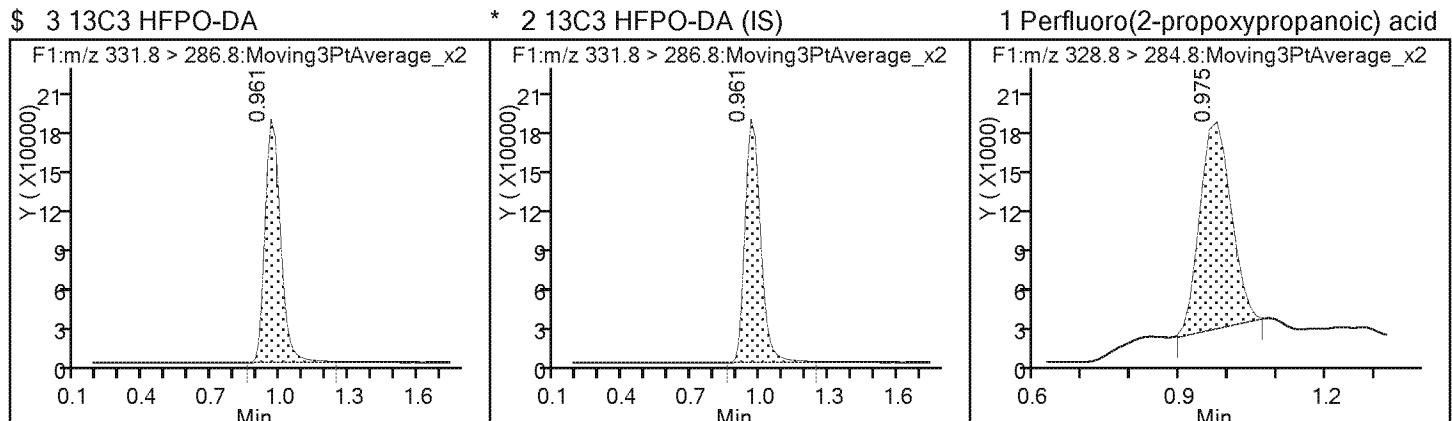
First Level Reviewer: meyera Date: 08-Feb-2018 15:23:01

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 828765 11.1 1362
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 828765 10.0 1362
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 1.056 -0.081 1.000 68335 0.7411 8.8

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08070.d
Injection Date: 08-Feb-2018 15:02:31 Instrument ID: LC_LCMS7
Lims ID: 280-105950-B-27-A Lab Sample ID: 280-105950-27
Client ID: FAY-D-3721HEART-W1-1-013018
Operator ID: JBH ALS Bottle#: 34 Worklist Smp#: 39
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08070.d
 Lims ID: 280-105950-B-27-A
 Client ID: FAY-D-3721HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 15:02:31 ALS Bottle#: 34 Worklist Smp#: 39
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-27-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:30 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:23:01

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.1	111.01

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3721HEART-W1-2-0130 Lab Sample ID: 280-105950-28
18 _____

Matrix: Water Lab File ID: hfpo718B08071.d

Analysis Method: 8321A Date Collected: 01/30/2018 13:50

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 247.6 (mL) Date Analyzed: 02/08/2018 15:05

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	111		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08071.d
 Lims ID: 280-105950-C-28-A
 Client ID: FAY-D-3721HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 15:05:47 ALS Bottle#: 35 Worklist Smp#: 40
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-28-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:30 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:23:03

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 830815 11.1 1509
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 830815 10.0 1509

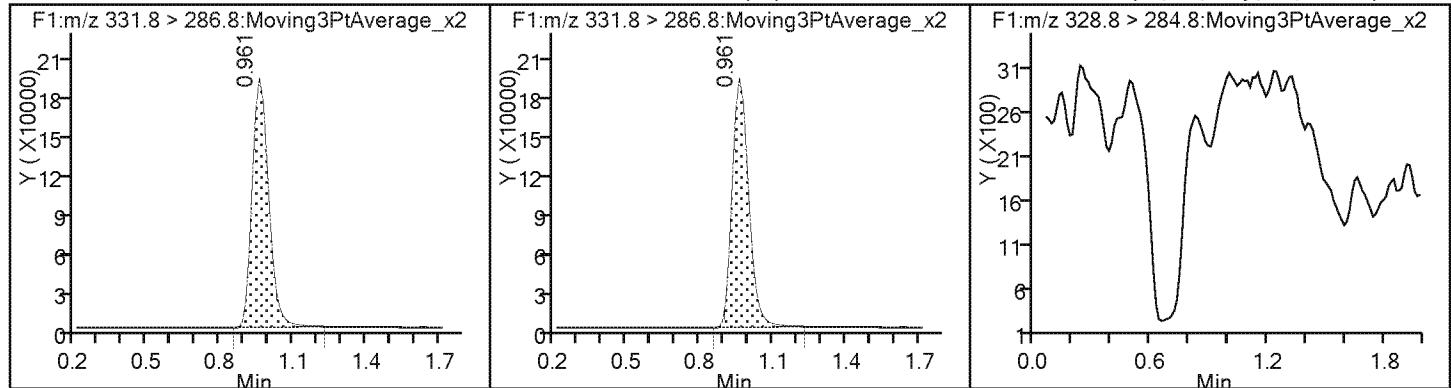
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08071.d
Injection Date: 08-Feb-2018 15:05:47 Instrument ID: LC_LCMS7
Lims ID: 280-105950-C-28-A Lab Sample ID: 280-105950-28
Client ID: FAY-D-3721HEART-W1-2-013018
Operator ID: JBH ALS Bottle#: 35 Worklist Smp#: 40
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (ND)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08071.d
 Lims ID: 280-105950-C-28-A
 Client ID: FAY-D-3721HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 15:05:47 ALS Bottle#: 35 Worklist Smp#: 40
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-28-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:30 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:23:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.1	111.28

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3745HEART-W1-1-0130 Lab Sample ID: 280-105950-29
18 _____

Matrix: Water Lab File ID: hfpo718B08072.d

Analysis Method: 8321A Date Collected: 01/30/2018 14:08

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 247.4 (mL) Date Analyzed: 02/08/2018 15:09

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.014		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	111		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08072.d
 Lims ID: 280-105950-C-29-A
 Client ID: FAY-D-3745HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 15:09:02 ALS Bottle#: 36 Worklist Smp#: 41
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-29-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:30 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:23:06

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.947 1.045 -0.098 1.000 826134 11.1 1268
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.947 1.045 -0.098 1.000 826134 10.0 1268
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.961 1.056 -0.095 1.000 62938 0.6822 7.9

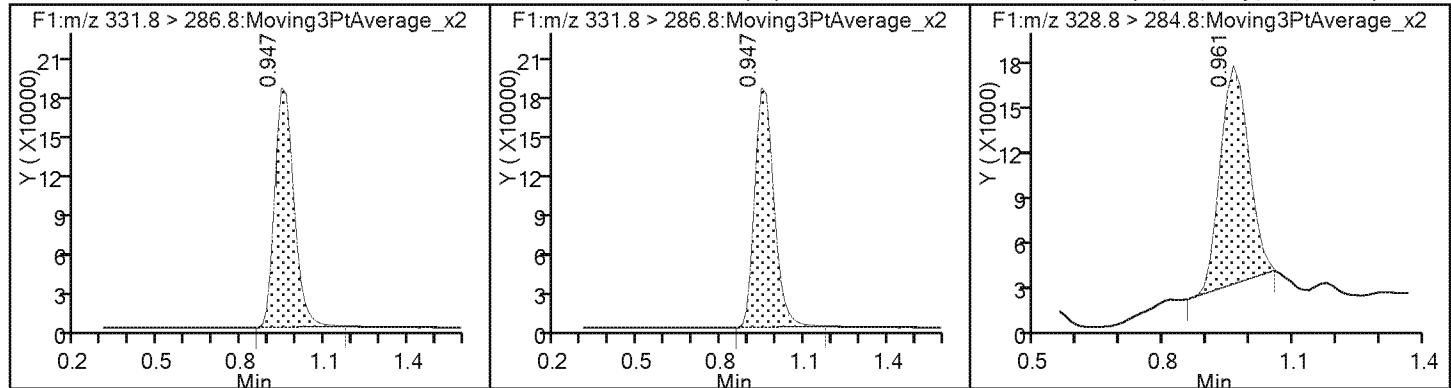
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08072.d
Injection Date: 08-Feb-2018 15:09:02 Instrument ID: LC_LCMS7
Lims ID: 280-105950-C-29-A Lab Sample ID: 280-105950-29
Client ID: FAY-D-3745HEART-W1-1-013018
Operator ID: JBH ALS Bottle#: 36 Worklist Smp#: 41
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08072.d
 Lims ID: 280-105950-C-29-A
 Client ID: FAY-D-3745HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 15:09:02 ALS Bottle#: 36 Worklist Smp#: 41
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-29-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:30 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:23:06

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.1	110.65

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3745HEART-W1-2-0130 Lab Sample ID: 280-105950-30
18 _____

Matrix: Water Lab File ID: hfpo718B08073.d

Analysis Method: 8321A Date Collected: 01/30/2018 14:09

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 254.9 (mL) Date Analyzed: 02/08/2018 15:12

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.012		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	119		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08073.d
 Lims ID: 280-105950-A-30-A
 Client ID: FAY-D-3745HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 15:12:18 ALS Bottle#: 37 Worklist Smp#: 42
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-30-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:30 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:23:09

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.975 1.045 -0.070 1.000 888502 11.9 1141
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.975 1.045 -0.070 1.000 888502 10.0 1141
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.988 1.056 -0.068 1.000 62433 0.6266 7.1

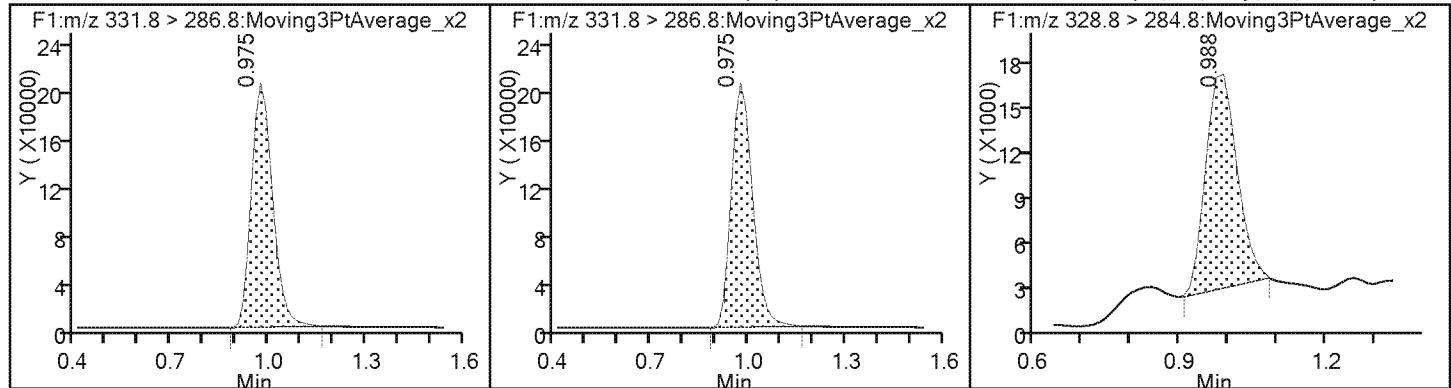
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08073.d
Injection Date: 08-Feb-2018 15:12:18 Instrument ID: LC_LCMS7
Lims ID: 280-105950-A-30-A Lab Sample ID: 280-105950-30
Client ID: FAY-D-3745HEART-W1-2-013018
Operator ID: JBH ALS Bottle#: 37 Worklist Smp#: 42
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08073.d
 Lims ID: 280-105950-A-30-A
 Client ID: FAY-D-3745HEART-W1-2-013018
 Sample Type: Client
 Inject. Date: 08-Feb-2018 15:12:18 ALS Bottle#: 37 Worklist Smp#: 42
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-30-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:30 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:23:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.9	119.01

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3765HEART-W1-1-0130 Lab Sample ID: 280-105950-31
18 _____

Matrix: Water Lab File ID: hfpo718B09029.d

Analysis Method: 8321A Date Collected: 01/30/2018 14:42

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 281.9 (mL) Date Analyzed: 02/09/2018 10:10

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.062		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	87		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09029.d
 Lims ID: 280-105950-B-31-A
 Client ID: FAY-D-3765HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:10:17 ALS Bottle#: 26 Worklist Smp#: 19
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-31-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:11 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:43

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.907 1.045 -0.138 1.000 651443 8.73 1458
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.907 1.045 -0.138 1.000 651443 10.0 1458
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.920 1.056 -0.136 1.000 245269 3.51 25.0

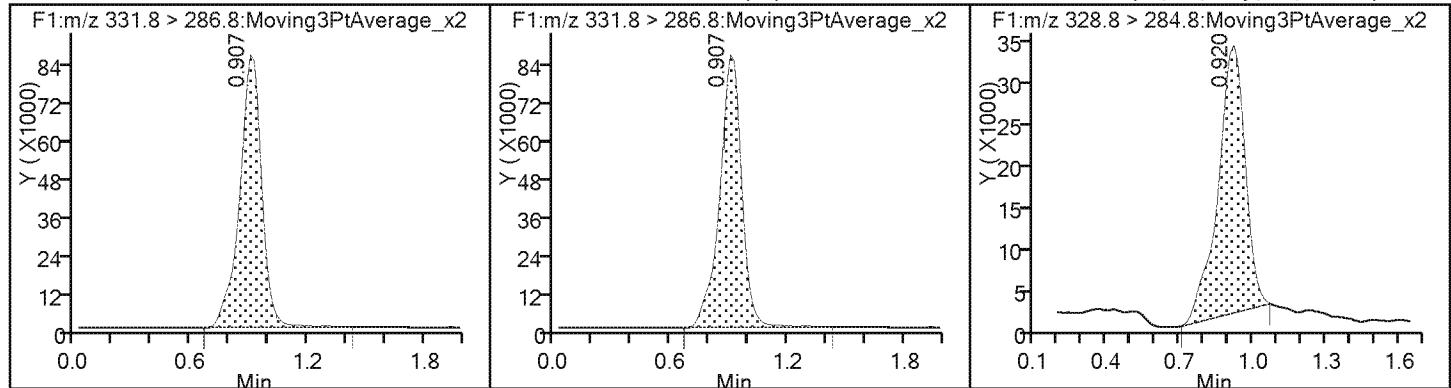
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfpo718B09029.d
Injection Date: 09-Feb-2018 10:10:17 Instrument ID: LC_LCMS7
Lims ID: 280-105950-B-31-A Lab Sample ID: 280-105950-31
Client ID: FAY-D-3765HEART-W1-1-013018
Operator ID: JBH ALS Bottle#: 26 Worklist Smp#: 19
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09029.d
 Lims ID: 280-105950-B-31-A
 Client ID: FAY-D-3765HEART-W1-1-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:10:17 ALS Bottle#: 26 Worklist Smp#: 19
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-31-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:11 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.73	87.25

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-6676NC87H-W1-1-0130 Lab Sample ID: 280-105950-32
18 _____

Matrix: Water Lab File ID: hfpo718B09030.d

Analysis Method: 8321A Date Collected: 01/30/2018 10:02

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 288.7 (mL) Date Analyzed: 02/09/2018 10:13

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.011		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	87		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09030.d
 Lims ID: 280-105950-C-32-A
 Client ID: FAY-D-6676NC87H-W1-1-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:13:33 ALS Bottle#: 27 Worklist Smp#: 20
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-32-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:11 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:45

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.920 1.045 -0.125 1.000 648386 8.68 1524
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.920 1.045 -0.125 648386 10.0 1524
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.934 1.056 -0.122 1.000 47988 0.6618 7.7

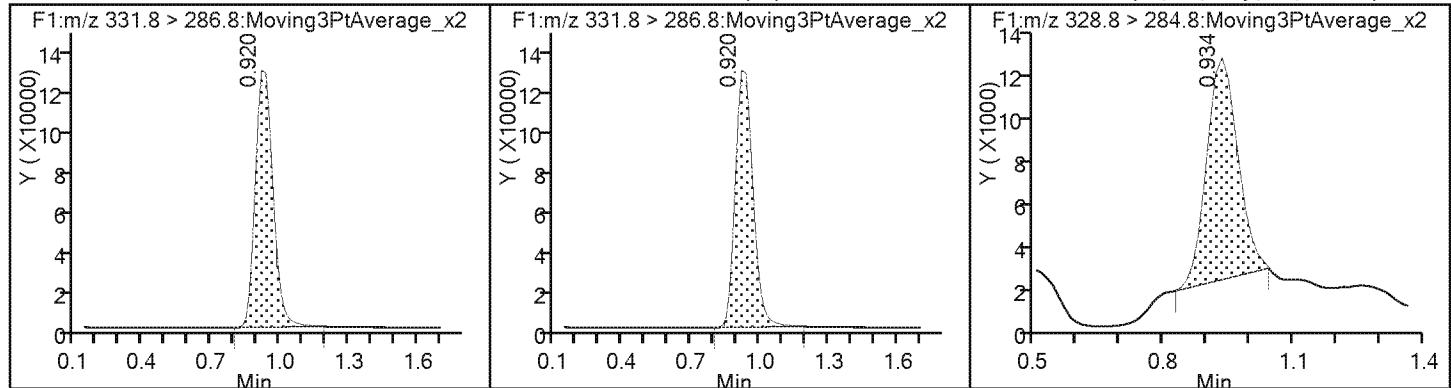
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfpo718B09030.d
Injection Date: 09-Feb-2018 10:13:33 Instrument ID: LC_LCMS7
Lims ID: 280-105950-C-32-A Lab Sample ID: 280-105950-32
Client ID: FAY-D-6676NC87H-W1-1-013018
Operator ID: JBH ALS Bottle#: 27 Worklist Smp#: 20
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09030.d
 Lims ID: 280-105950-C-32-A
 Client ID: FAY-D-6676NC87H-W1-1-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:13:33 ALS Bottle#: 27 Worklist Smp#: 20
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-32-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:11 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:45

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.68	86.85

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-6740NC87H-W1-1-0130 Lab Sample ID: 280-105950-33
18 _____

Matrix: Water Lab File ID: hfpo718B09031.d

Analysis Method: 8321A Date Collected: 01/30/2018 10:11

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 252 (mL) Date Analyzed: 02/09/2018 10:16

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.038		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	90		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09031.d
 Lims ID: 280-105950-C-33-A
 Client ID: FAY-D- 6740NC87H-W1-1-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:16:48 ALS Bottle#: 28 Worklist Smp#: 21
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-33-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:11 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:47

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
331.8 > 286.8 0.920 1.045 -0.125 1.000 671632 9.00 1201

* 2 13C3 HFPO-DA (IS)
331.8 > 286.8 0.920 1.045 -0.125 671632 10.0 1201

1 Perfluoro(2-propoxypropanoic) acid
328.8 > 284.8 0.920 1.056 -0.136 1.000 139418 1.92 14.2 M M

QC Flag Legend

Review Flags

M - Manually Integrated

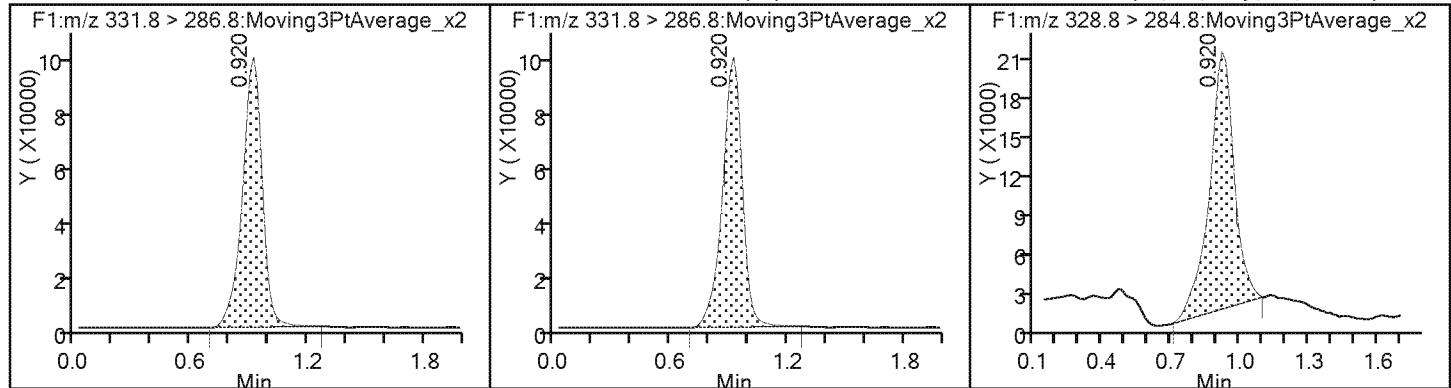
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfpo718B09031.d
Injection Date: 09-Feb-2018 10:16:48 Instrument ID: LC_LCMS7
Lims ID: 280-105950-C-33-A Lab Sample ID: 280-105950-33
Client ID: FAY-D- 6740NC87H-W1-1-013018
Operator ID: JBH ALS Bottle#: 28 Worklist Smp#: 21
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (M)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09031.d
 Lims ID: 280-105950-C-33-A
 Client ID: FAY-D- 6740NC87H-W1-1-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:16:48 ALS Bottle#: 28 Worklist Smp#: 21
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-33-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:11 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:47

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	9.00	89.96

TestAmerica Denver

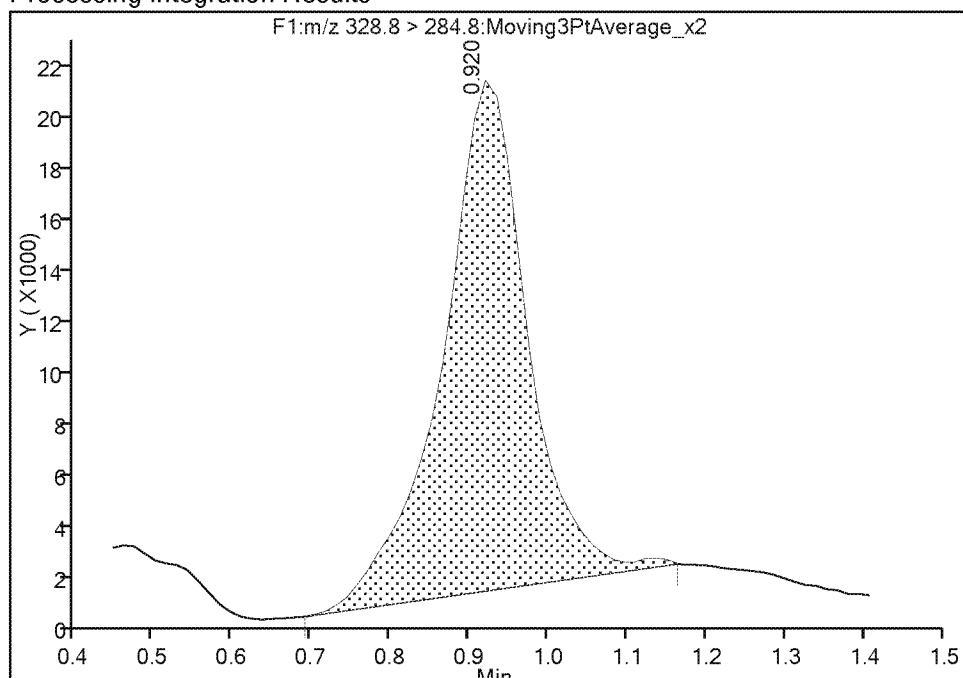
Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfpo718B09031.d
 Injection Date: 09-Feb-2018 10:16:48 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-C-33-A Lab Sample ID: 280-105950-33
 Client ID: FAY-D- 6740NC87H-W1-1-013018
 Operator ID: JBH ALS Bottle#: 28 Worklist Smp#: 21
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

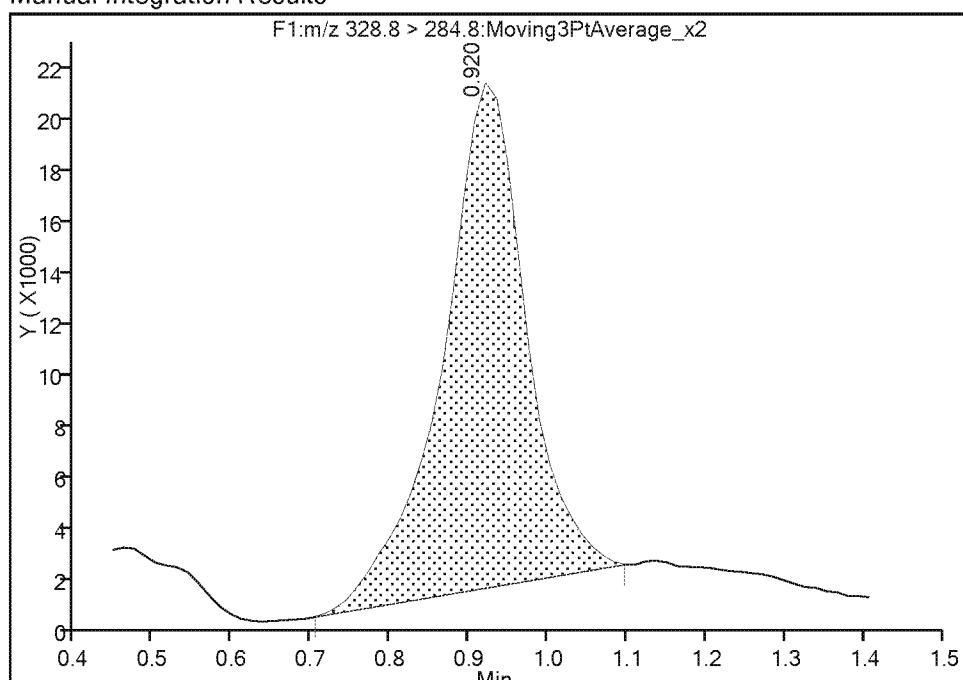
RT: 0.92
 Area: 144570
 Amount: 1.989462
 Amount Units: ug/l

Processing Integration Results



RT: 0.92
 Area: 139418
 Amount: 1.917353
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 09-Feb-2018 12:00:00

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-6740NC87H-W1-2-0130 Lab Sample ID: 280-105950-34
18 _____

Matrix: Water Lab File ID: hfpo718B09032.d

Analysis Method: 8321A Date Collected: 01/30/2018 10:25

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 297.3 (mL) Date Analyzed: 02/09/2018 10:20

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.031		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	92		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09032.d
 Lims ID: 280-105950-B-34-A
 Client ID: FAY-D-6740NC87H-W1-2-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:20:04 ALS Bottle#: 29 Worklist Smp#: 22
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-34-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:11 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:13

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA

331.8 > 286.8 0.920 1.045 -0.125 1.000 684456 9.17 902

* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 0.920 1.045 -0.125 684456 10.0 902

1 Perfluoro(2-propoxypropanoic) acid M

328.8 > 284.8 0.920 1.056 -0.136 1.000 137786 1.86 24.6 M

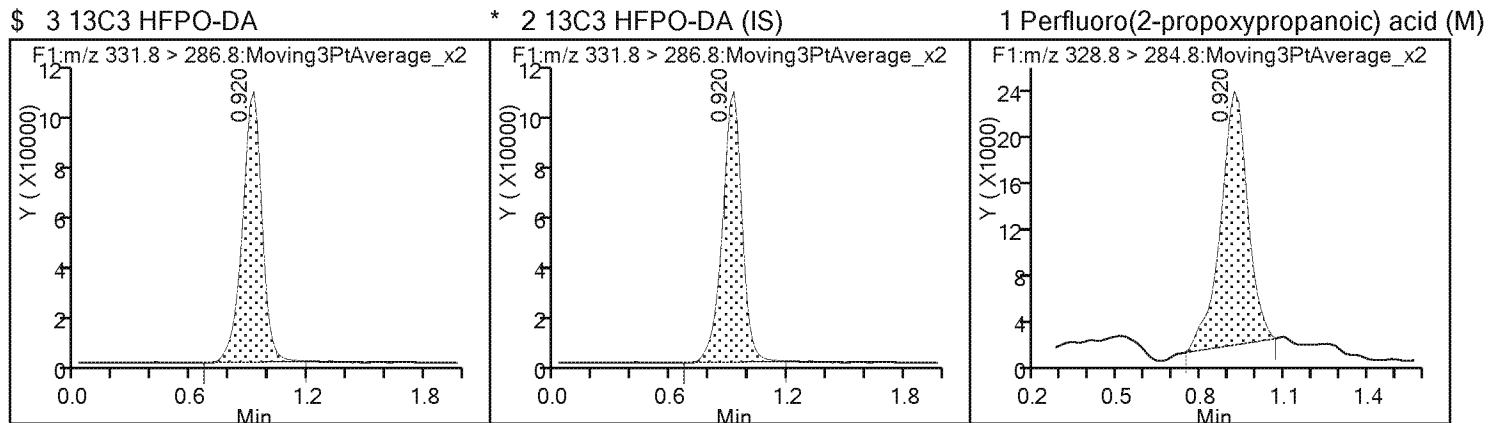
QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfpo718B09032.d
Injection Date: 09-Feb-2018 10:20:04 Instrument ID: LC_LCMS7
Lims ID: 280-105950-B-34-A Lab Sample ID: 280-105950-34
Client ID: FAY-D-6740NC87H-W1-2-013018
Operator ID: JBH ALS Bottle#: 29 Worklist Smp#: 22
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09032.d
 Lims ID: 280-105950-B-34-A
 Client ID: FAY-D-6740NC87H-W1-2-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:20:04 ALS Bottle#: 29 Worklist Smp#: 22
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-34-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:11 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:13

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	9.17	91.68

TestAmerica Denver

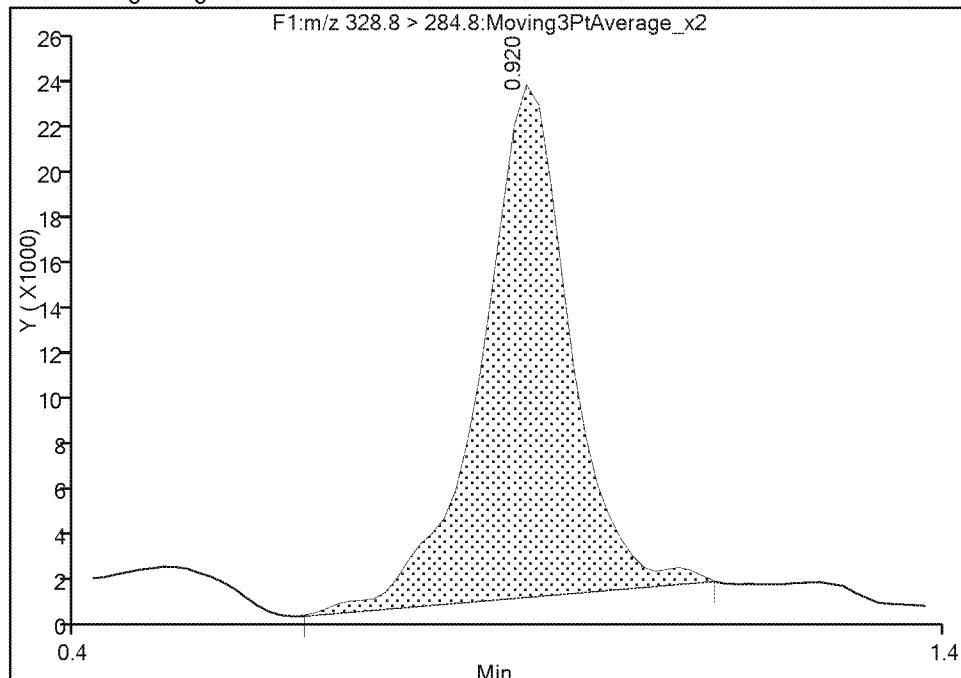
Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfpo718B09032.d
 Injection Date: 09-Feb-2018 10:20:04 Instrument ID: LC_LCMS7
 Lims ID: 280-105950-B-34-A Lab Sample ID: 280-105950-34
 Client ID: FAY-D-6740NC87H-W1-2-013018
 Operator ID: JBH ALS Bottle#: 29 Worklist Smp#: 22
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

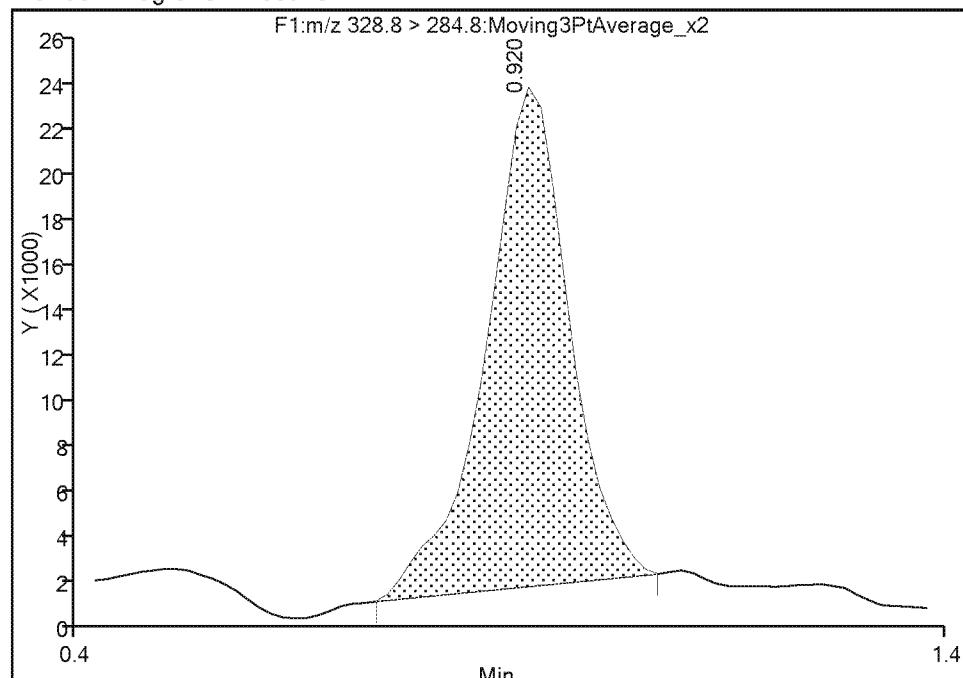
RT: 0.92
 Area: 151468
 Amount: 2.046287
 Amount Units: ug/l

Processing Integration Results



RT: 0.92
 Area: 137786
 Amount: 1.858380
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 09-Feb-2018 12:00:10

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3833Heart-W1-1-0130 Lab Sample ID: 280-105950-35
18 _____

Matrix: Water Lab File ID: hfpo718B09033.d

Analysis Method: 8321A Date Collected: 01/30/2018 16:20

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 277.3 (mL) Date Analyzed: 02/09/2018 10:23

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.054		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	92		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09033.d
 Lims ID: 280-105950-B-35-A
 Client ID: FAY-D-3833Heart-W1-1-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:23:19 ALS Bottle#: 30 Worklist Smp#: 23
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-35-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:11 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

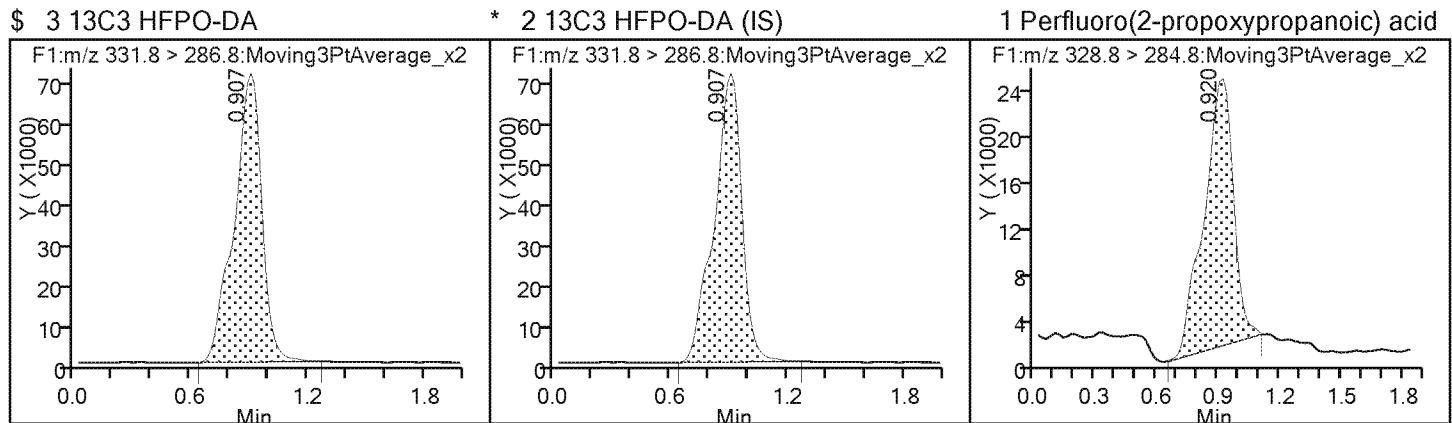
First Level Reviewer: meyera Date: 09-Feb-2018 12:00:17

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.907 1.045 -0.138 1.000 684338 9.17 758
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.907 1.045 -0.138 1.000 684338 10.0 758
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.920 1.056 -0.136 1.000 220227 2.99 15.5

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfp0718B09033.d
Injection Date: 09-Feb-2018 10:23:19 Instrument ID: LC_LCMS7
Lims ID: 280-105950-B-35-A Lab Sample ID: 280-105950-35
Client ID: FAY-D-3833Heart-W1-1-013018
Operator ID: JBH ALS Bottle#: 30 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09033.d
 Lims ID: 280-105950-B-35-A
 Client ID: FAY-D-3833Heart-W1-1-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:23:19 ALS Bottle#: 30 Worklist Smp#: 23
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-35-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:11 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:17

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	9.17	91.66

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3833Heart-W1-2-0130 Lab Sample ID: 280-105950-36
18 _____

Matrix: Water Lab File ID: hfpo718B09034.d

Analysis Method: 8321A Date Collected: 01/30/2018 16:21

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 299.7 (mL) Date Analyzed: 02/09/2018 10:26

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.052		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	102		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09034.d
 Lims ID: 280-105950-D-36-A
 Client ID: FAY-D-3833Heart-W1-2-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:26:34 ALS Bottle#: 31 Worklist Smp#: 24
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-36-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:11 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

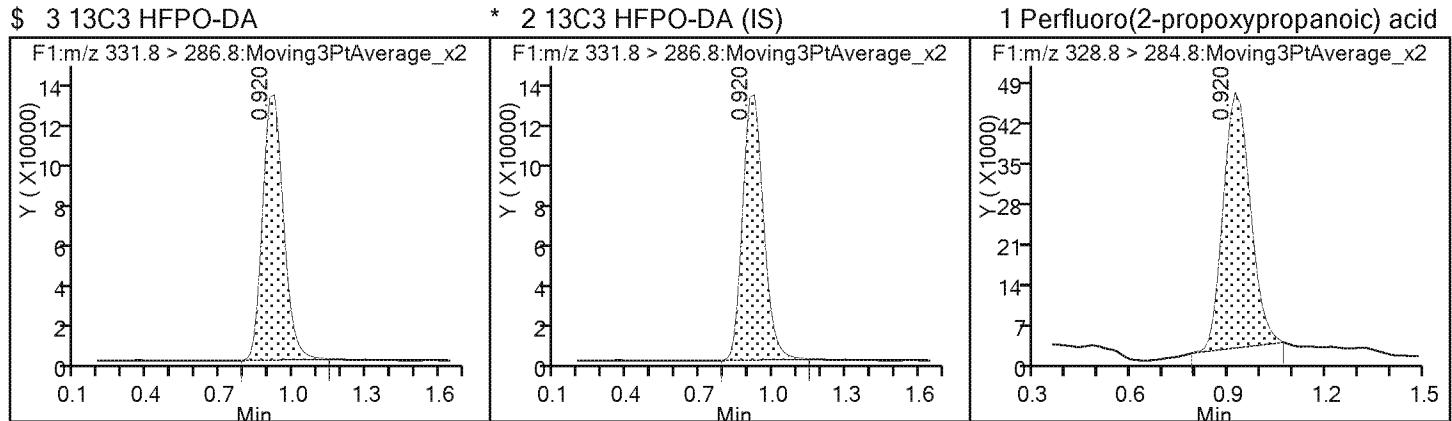
First Level Reviewer: meyera Date: 09-Feb-2018 12:00:20

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.920 1.045 -0.125 1.000 759855 10.2 989
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.920 1.045 -0.125 1.000 759855 10.0 989
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.920 1.056 -0.136 1.000 252692 3.09 29.9

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfp0718B09034.d
Injection Date: 09-Feb-2018 10:26:34 Instrument ID: LC_LCMS7
Lims ID: 280-105950-D-36-A Lab Sample ID: 280-105950-36
Client ID: FAY-D-3833Heart-W1-2-013018
Operator ID: JBH ALS Bottle#: 31 Worklist Smp#: 24
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09034.d
 Lims ID: 280-105950-D-36-A
 Client ID: FAY-D-3833Heart-W1-2-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:26:34 ALS Bottle#: 31 Worklist Smp#: 24
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-36-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:11 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:20

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.2	101.78

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3624PNEBR-W1-1-0130 Lab Sample ID: 280-105950-37
18 _____

Matrix: Water Lab File ID: hfpo718B09036.d

Analysis Method: 8321A Date Collected: 01/30/2018 15:28

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 267 (mL) Date Analyzed: 02/09/2018 10:33

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.11		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	95		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09036.d
 Lims ID: 280-105950-A-37-A
 Client ID: FAY-D-3624PineB-W1-1-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:33:04 ALS Bottle#: 32 Worklist Smp#: 26
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-37-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

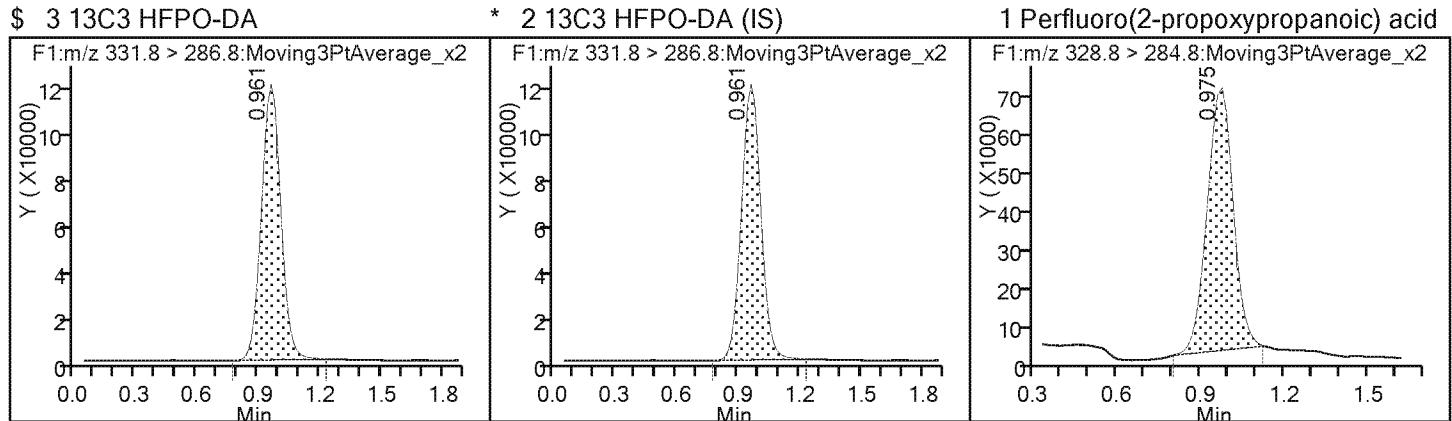
First Level Reviewer: meyera Date: 09-Feb-2018 12:00:27

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 706693 9.47 1082
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 706693 10.0 1082
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 1.056 -0.081 1.000 434965 5.75 35.9

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfpo718B09036.d
Injection Date: 09-Feb-2018 10:33:04 Instrument ID: LC_LCMS7
Lims ID: 280-105950-A-37-A Lab Sample ID: 280-105950-37
Client ID: FAY-D-3624PineB-W1-1-013018
Operator ID: JBH ALS Bottle#: 32 Worklist Smp#: 26
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09036.d
 Lims ID: 280-105950-A-37-A
 Client ID: FAY-D-3624PineB-W1-1-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:33:04 ALS Bottle#: 32 Worklist Smp#: 26
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-37-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:27

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	9.47	94.65

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3624PNEBR-W1-2-0130 Lab Sample ID: 280-105950-38
18D

Matrix: Water Lab File ID: hfpo718B09037.d

Analysis Method: 8321A Date Collected: 01/30/2018 15:45

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 275.3 (mL) Date Analyzed: 02/09/2018 10:36

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.11		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	90		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09037.d
 Lims ID: 280-105950-D-38-A
 Client ID: FAY-D-3624PineB-W1-2-013018D
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:36:20 ALS Bottle#: 33 Worklist Smp#: 27
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-38-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

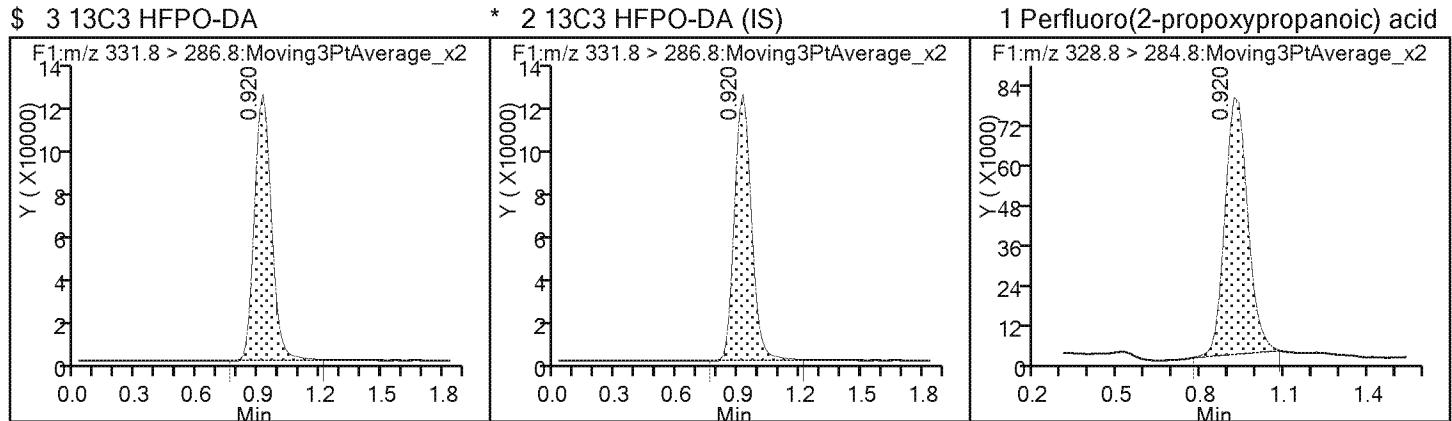
First Level Reviewer: meyera Date: 09-Feb-2018 12:00:30

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.920 1.045 -0.125 1.000 675310 9.05 1342
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.920 1.045 -0.125 675310 10.0 1342
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.920 1.056 -0.136 1.000 427087 5.91 54.2

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfpo718B09037.d
Injection Date: 09-Feb-2018 10:36:20 Instrument ID: LC_LCMS7
Lims ID: 280-105950-D-38-A Lab Sample ID: 280-105950-38
Client ID: FAY-D-3624PineB-W1-2-013018D
Operator ID: JBH ALS Bottle#: 33 Worklist Smp#: 27
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09037.d
 Lims ID: 280-105950-D-38-A
 Client ID: FAY-D-3624PineB-W1-2-013018D
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:36:20 ALS Bottle#: 33 Worklist Smp#: 27
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-38-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:30

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	9.05	90.45

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3833HEART-W1-1-0130 Lab Sample ID: 280-105950-39
18D

Matrix: Water Lab File ID: hfpo718B09038.d

Analysis Method: 8321A Date Collected: 01/30/2018 16:20

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 277.3 (mL) Date Analyzed: 02/09/2018 10:39

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.064		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	86		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09038.d
 Lims ID: 280-105950-B-39-A
 Client ID: FAY-D-3833HEART-W1-1-013018D
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:39:36 ALS Bottle#: 34 Worklist Smp#: 28
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-39-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

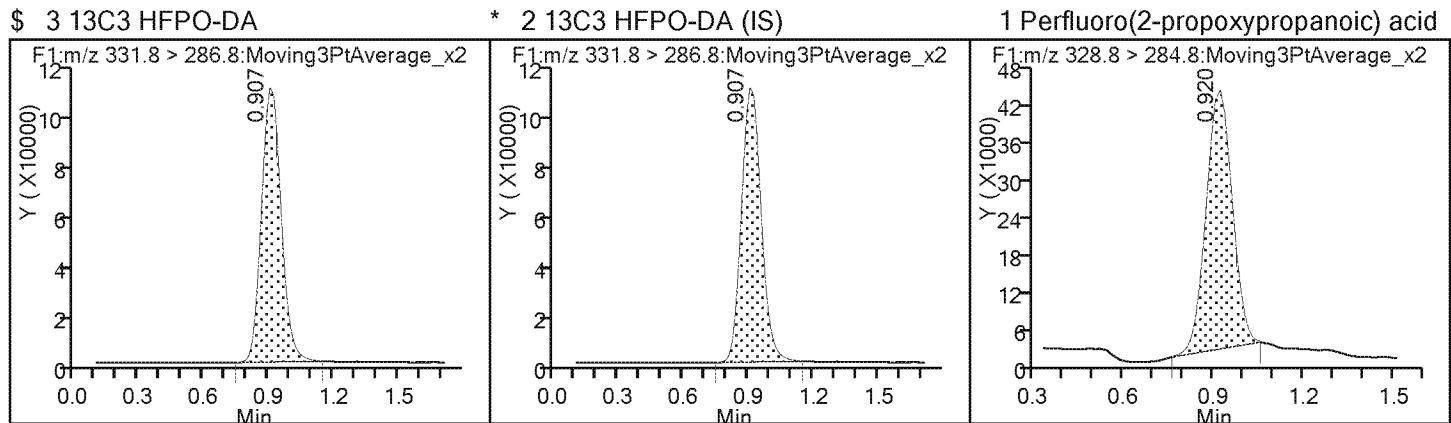
First Level Reviewer: meyera Date: 09-Feb-2018 12:00:32

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.907 1.045 -0.138 1.000 644666 8.63 1021
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.907 1.045 -0.138 1.000 644666 10.0 1021
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.920 1.056 -0.136 1.000 245352 3.54 30.8

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfpo718B09038.d
Injection Date: 09-Feb-2018 10:39:36 Instrument ID: LC_LCMS7
Lims ID: 280-105950-B-39-A Lab Sample ID: 280-105950-39
Client ID: FAY-D-3833HEART-W1-1-013018D
Operator ID: JBH ALS Bottle#: 34 Worklist Smp#: 28
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09038.d
 Lims ID: 280-105950-B-39-A
 Client ID: FAY-D-3833HEART-W1-1-013018D
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:39:36 ALS Bottle#: 34 Worklist Smp#: 28
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-39-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:32

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.63	86.35

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3624PNEBR-W1-2-0130 Lab Sample ID: 280-105950-40
18 _____

Matrix: Water Lab File ID: hfpo718B09039.d

Analysis Method: 8321A Date Collected: 01/30/2018 15:45

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 280.2 (mL) Date Analyzed: 02/09/2018 10:42

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.10		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	91		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09039.d
 Lims ID: 280-105950-A-40-A
 Client ID: FAY-D-3624PineB-W1-2-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:42:51 ALS Bottle#: 35 Worklist Smp#: 29
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-40-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:36

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.907 1.045 -0.138 1.000 676109 9.06 1096
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.907 1.045 -0.138 1.000 676109 10.0 1096
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.920 1.056 -0.136 1.000 408218 5.64 46.3

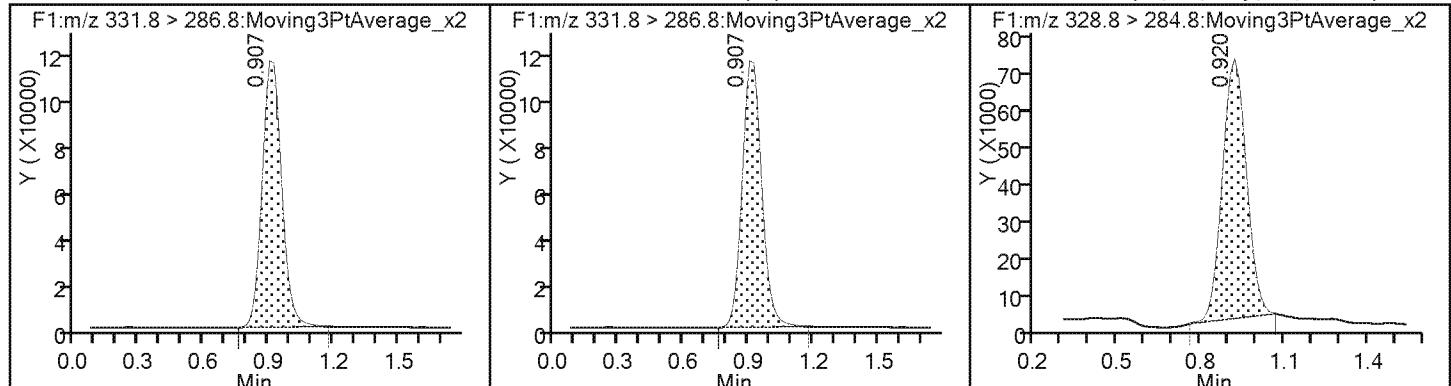
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfpo718B09039.d
Injection Date: 09-Feb-2018 10:42:51 Instrument ID: LC_LCMS7
Lims ID: 280-105950-A-40-A Lab Sample ID: 280-105950-40
Client ID: FAY-D-3624PineB-W1-2-013018
Operator ID: JBH ALS Bottle#: 35 Worklist Smp#: 29
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09039.d
 Lims ID: 280-105950-A-40-A
 Client ID: FAY-D-3624PineB-W1-2-013018
 Sample Type: Client
 Inject. Date: 09-Feb-2018 10:42:51 ALS Bottle#: 35 Worklist Smp#: 29
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-A-40-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:36

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	9.06	90.56

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-105950-1 Analy Batch No.: 387775

SDG No.: _____

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 14:40 Calibration End Date: 09/14/2017 15:01 Calibration ID: 30321

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-387775/3	hfpo717I14052.d
Level 2	STD002 280-387775/4	hfpo717I14053.d
Level 3	STD003 280-387775/5	hfpo717I14054.d
Level 4	STD004 280-387775/6	hfpo717I14055.d
Level 5	STD005 280-387775/7	hfpo717I14056.d
Level 6	STD006 280-387775/8	hfpo717I14057.d
Level 7	STD007 280-387775/9	hfpo717I14058.d
Level 8	STD008 280-387775/10	hfpo717I14059.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8		RT WINDOW	AVG RT
Perfluoro(2-propoxypropanoic) acid	1.002	0.988	0.988	0.988	0.975	0.975	0.988	0.988		0.486 - 1.486	0.987
13C3 HFPO-DA	0.988	0.975	0.975	0.988	0.975	0.975	0.988	0.988		0.481 - 1.481	0.982

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-105950-1 Analy Batch No.: 387775

SDG No.: _____

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 14:40 Calibration End Date: 09/14/2017 15:01 Calibration ID: 30321

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-387775/3	hfpo717I14052.d
Level 2	STD002 280-387775/4	hfpo717I14053.d
Level 3	STD003 280-387775/5	hfpo717I14054.d
Level 4	STD004 280-387775/6	hfpo717I14055.d
Level 5	STD005 280-387775/7	hfpo717I14056.d
Level 6	STD006 280-387775/8	hfpo717I14057.d
Level 7	STD007 280-387775/9	hfpo717I14058.d
Level 8	STD008 280-387775/10	hfpo717I14059.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4		B	M1	M2								
13C3 HFPO-DA	206978	200375	208177	195084	Ave		192739.525				6.4		30.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-105950-1 Analy Batch No.: 387775

SDG No.: _____

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 14:40 Calibration End Date: 09/14/2017 15:01 Calibration ID: 30321

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Perfluoro(2-propoxypropanoic) acid	1.6312 0.9640	1.1780 0.9353	0.9745 0.8831	0.9868	1.0688	Lin1	0.1732	0.9076							0.9980		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

Analy Batch No.: 387775

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 14:40 Calibration End Date: 09/14/2017 15:01 Calibration ID: 30321

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-387775/3	hfpo717I14052.d
Level 2	STD002 280-387775/4	hfpo717I14053.d
Level 3	STD003 280-387775/5	hfpo717I14054.d
Level 4	STD004 280-387775/6	hfpo717I14055.d
Level 5	STD005 280-387775/7	hfpo717I14056.d
Level 6	STD006 280-387775/8	hfpo717I14057.d
Level 7	STD007 280-387775/9	hfpo717I14058.d
Level 8	STD008 280-387775/10	hfpo717I14059.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
13C3 HFPO-DA	Ave	2069777 1724989	2003748 1884947	2081766 1878107	1950837	1824991	10.0 10.0	10.0 10.0	10.0 10.0	10.0 10.0	10.0

Curve Type Legend:

Ave = Average

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-105950-1 Analy Batch No.: 387775

SDG No.: _____

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 09/14/2017 14:40 Calibration End Date: 09/14/2017 15:01 Calibration ID: 30321

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-387775/3	hfpo717I14052.d
Level 2	STD002 280-387775/4	hfpo717I14053.d
Level 3	STD003 280-387775/5	hfpo717I14054.d
Level 4	STD004 280-387775/6	hfpo717I14055.d
Level 5	STD005 280-387775/7	hfpo717I14056.d
Level 6	STD006 280-387775/8	hfpo717I14057.d
Level 7	STD007 280-387775/9	hfpo717I14058.d
Level 8	STD008 280-387775/10	hfpo717I14059.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Perfluoro(2-propoxypropanoic) acid	13CP ODA	Lin1	84406 1662919	118017 4407541	202876 8293101	385009	975278	0.250 10.0	0.500 25.0	1.00 50.0	2.00	5.00

Curve Type Legend:

Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14052.d
 Lims ID: std001
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 14-Sep-2017 14:40:03 ALS Bottle#: 2 Worklist Smp#: 3
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: L1
 Misc. Info.: HFPO17I14
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 15-Sep-2017 07:29:39 Calib Date: 14-Sep-2017 15:01:22
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14059.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK034

First Level Reviewer: meyera Date: 15-Sep-2017 07:28:15

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.988 0.981 0.007 1.000 2069777 10.7 429
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.988 0.981 0.007 2069777 10.0 429
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 1.002 0.986 0.016 1.000 84406 0.2585 49.7

Reagents:

HFPO_CAL-1_00030 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20170915-62647.b\\hfp0717\\14052.d

Injection Date: 14-Sep-2017 14:40:03 Instrument ID: LC_LCMS7

Lims ID: std001

Client ID:

Operator ID: JBH ALS Bottle#: 2 Worklist Smp#: 3

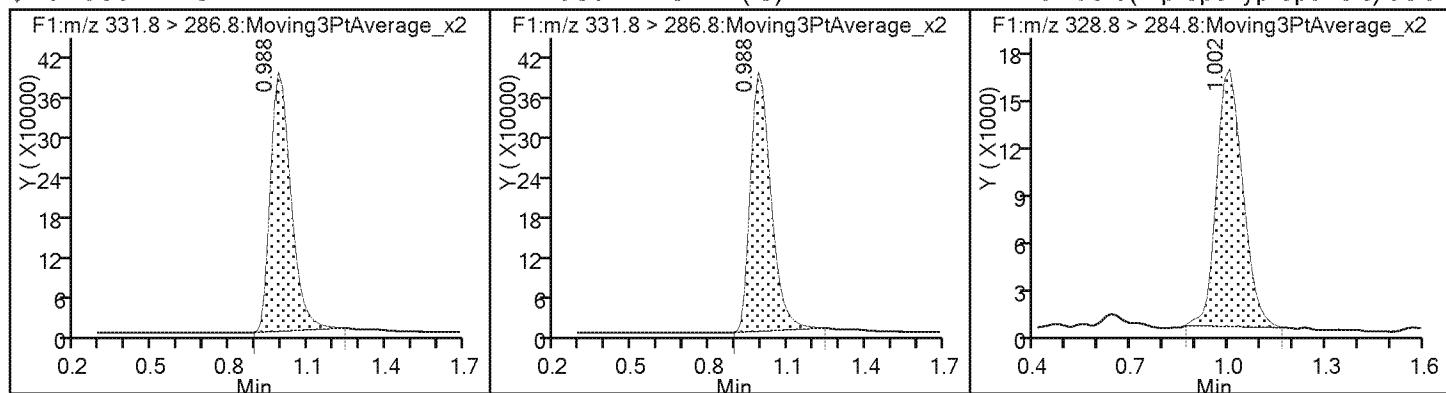
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14053.d
 Lims ID: std002
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 14-Sep-2017 14:43:06 ALS Bottle#: 3 Worklist Smp#: 4
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: L2
 Misc. Info.: HFPO17I14
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 15-Sep-2017 07:29:39 Calib Date: 14-Sep-2017 15:01:22
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14059.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK034

First Level Reviewer: meyera Date: 15-Sep-2017 07:28:18

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

* 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.975 0.981 -0.006 2003748 10.0 386
 \$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.975 0.981 -0.006 1.000 2003748 10.4 386
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.988 0.986 0.002 1.000 118017 0.4581 56.6

Reagents:

HFPO_CAL-2_00031 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20170915-62647.b\\hfp0717\\14053.d

Injection Date: 14-Sep-2017 14:43:06

Instrument ID: LC_LCMS7

Lims ID: std002

Client ID:

Operator ID: JBH

ALS Bottle#: 3 Worklist Smp#: 4

Injection Vol: 10.0 ul

Dil. Factor: 1.0000

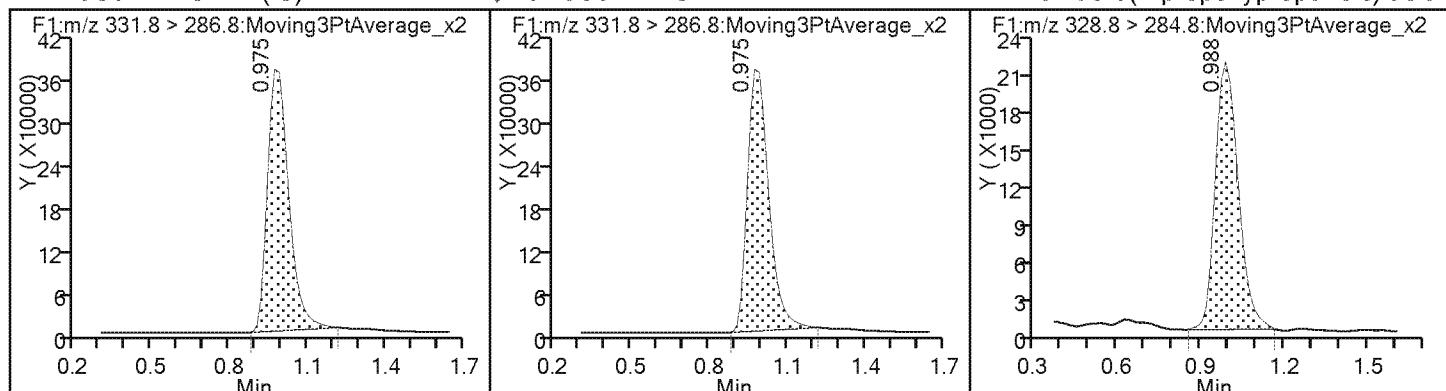
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

* 2 13C3 HFPO-DA (IS)

\$ 3 13C3 HFPO-DA

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14054.d
 Lims ID: std003
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 14-Sep-2017 14:46:08 ALS Bottle#: 4 Worklist Smp#: 5
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: L3
 Misc. Info.: HFPO17I14
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 15-Sep-2017 07:29:40 Calib Date: 14-Sep-2017 15:01:22
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14059.d

Column 1 : Det: F1:MRM

Process Host: XAWRK034

First Level Reviewer: meyera Date: 15-Sep-2017 07:28:20

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
331.8 > 286.8 0.975 0.981 -0.006 1.000 2081766 10.8 403

* 2 13C3 HFPO-DA (IS)
331.8 > 286.8 0.975 0.981 -0.006 2081766 10.0 403

1 Perfluoro(2-propoxypropanoic) acid
328.8 > 284.8 0.988 0.986 0.002 1.000 202876 0.8830 108

Reagents:

HFPO_CAL-3_00030 Amount Added: 1.00 Units: mL

Report Date: 15-Sep-2017 07:29:40

Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20170915-62647.b\\hfp0717\\14054.d

Injection Date: 14-Sep-2017 14:46:08

Instrument ID: LC_LCMS7

Lims ID: std003

Client ID:

Operator ID: JBH

ALS Bottle#: 4 Worklist Smp#: 5

Injection Vol: 10.0 ul

Dil. Factor: 1.0000

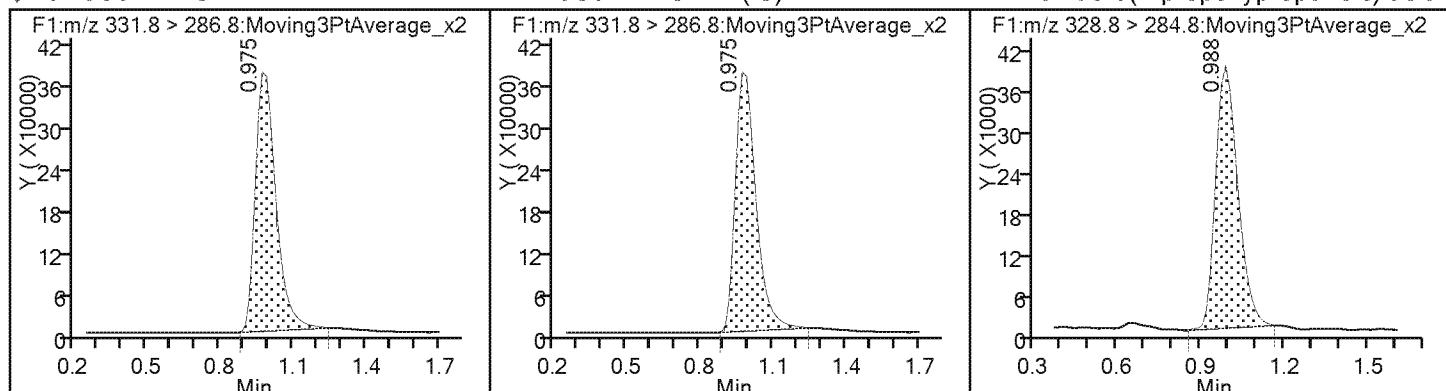
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14055.d
 Lims ID: std004
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 14-Sep-2017 14:49:11 ALS Bottle#: 5 Worklist Smp#: 6
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: L4
 Misc. Info.: HFPO17I14
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 15-Sep-2017 07:29:40 Calib Date: 14-Sep-2017 15:01:22
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14059.d

Column 1 : Det: F1:MRM

Process Host: XAWRK034

First Level Reviewer: meyera Date: 15-Sep-2017 07:28:22

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 0.988 0.981 0.007 1950837 10.0 384

\$ 3 13C3 HFPO-DA

331.8 > 286.8 0.988 0.981 0.007 1.000 1950837 10.1 384

1 Perfluoro(2-propoxypropanoic) acid

328.8 > 284.8 0.988 0.986 0.002 1.000 385009 1.98 162

Reagents:

HFPO_CAL-4_00030 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20170915-62647.b\\hfp0717\\14055.d

Injection Date: 14-Sep-2017 14:49:11 Instrument ID: LC_LCMS7

Lims ID: std004

Client ID:

Operator ID: JBH ALS Bottle#: 5 Worklist Smp#: 6

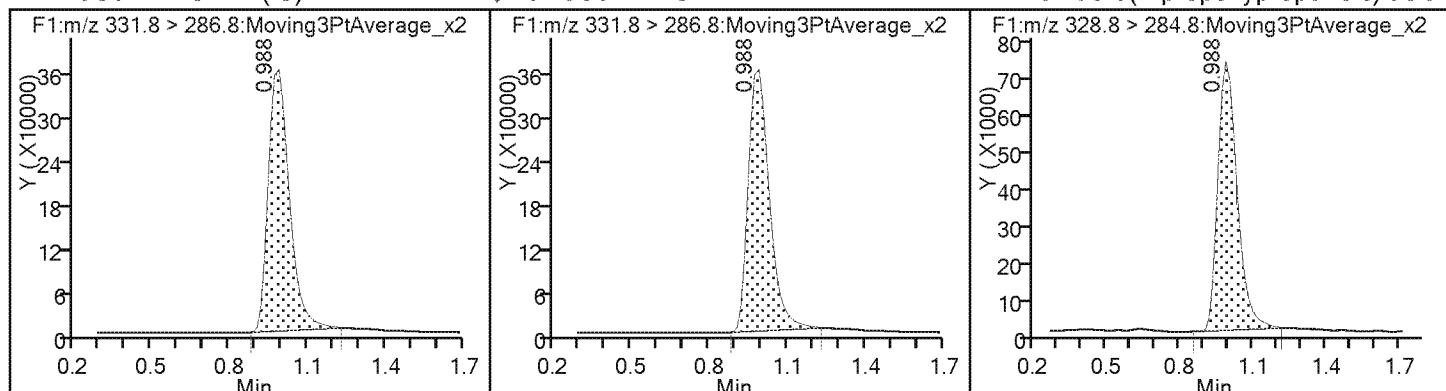
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

* 2 13C3 HFPO-DA (IS)

\$ 3 13C3 HFPO-DA

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14056.d
 Lims ID: std005
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 14-Sep-2017 14:52:13 ALS Bottle#: 6 Worklist Smp#: 7
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: L5
 Misc. Info.: HFPO17I14
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 15-Sep-2017 07:29:41 Calib Date: 14-Sep-2017 15:01:22
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14059.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK034

First Level Reviewer: meyera Date: 15-Sep-2017 07:28:25

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.975 0.981 -0.006 1.000 1824991 9.47 371
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.975 0.981 -0.006 1824991 10.0 371
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 0.986 -0.011 1.000 975278 5.70 268

Reagents:

HFPO_CAL-5_00067 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20170915-62647.b\\hfp0717\\14056.d

Injection Date: 14-Sep-2017 14:52:13 Instrument ID: LC_LCMS7

Lims ID: std005

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 7

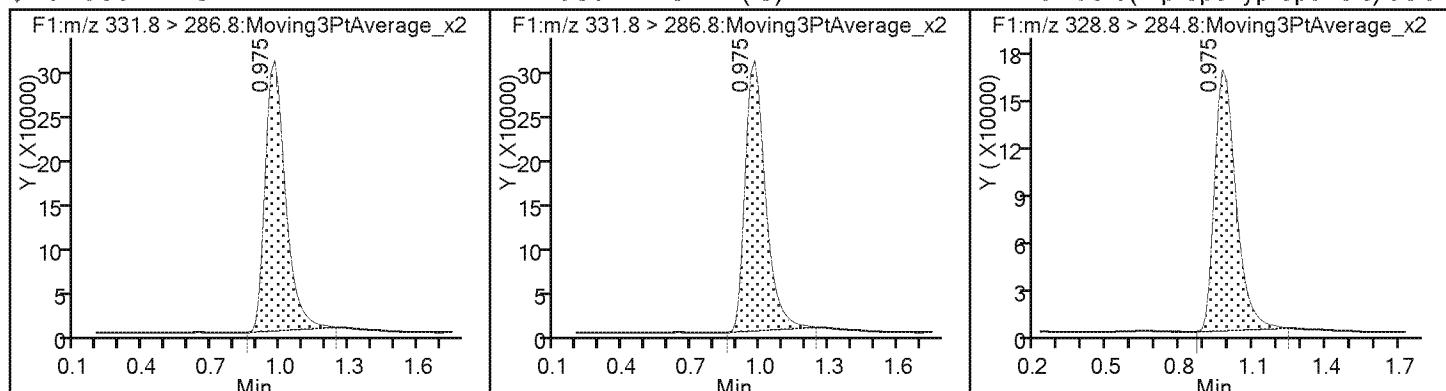
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14057.d
 Lims ID: std006
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 14-Sep-2017 14:55:16 ALS Bottle#: 7 Worklist Smp#: 8
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: L6
 Misc. Info.: HFPO17I14
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 15-Sep-2017 07:29:41 Calib Date: 14-Sep-2017 15:01:22
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14059.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK034

First Level Reviewer: meyera Date: 15-Sep-2017 07:28:27

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

* 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.975 0.981 -0.006 1724989 10.0 287
 \$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.975 0.981 -0.006 1.000 1724989 8.95 287
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 0.986 -0.011 1.000 1662919 10.4 248

Reagents:

HFPO_CAL-6_00067 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20170915-62647.b\\hfp0717\\14057.d

Injection Date: 14-Sep-2017 14:55:16 Instrument ID: LC_LCMS7

Lims ID: std006

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 8

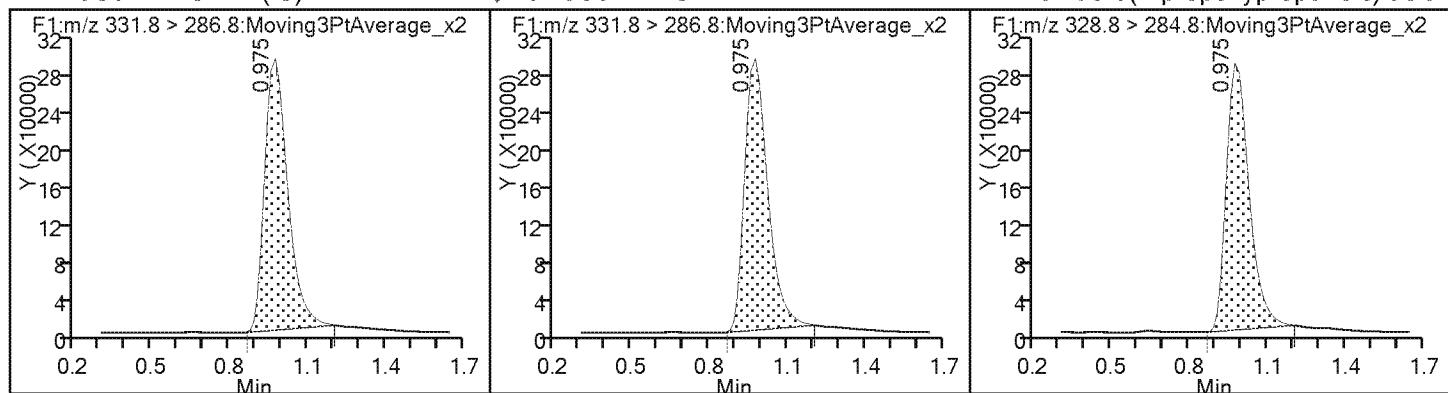
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

* 2 13C3 HFPO-DA (IS)

\$ 3 13C3 HFPO-DA

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14058.d
 Lims ID: std007
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 14-Sep-2017 14:58:19 ALS Bottle#: 8 Worklist Smp#: 9
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: L7
 Misc. Info.: HFPO17I14
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 15-Sep-2017 07:29:42 Calib Date: 14-Sep-2017 15:01:22
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14059.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK034

First Level Reviewer: meyera Date: 15-Sep-2017 07:28:29

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.988 0.981 0.007 1.000 1884947 9.78 361
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.988 0.981 0.007 1884947 10.0 361
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.988 0.986 0.002 1.000 4407541 25.6 379

Reagents:

HFPO_CAL-7_00030 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20170915-62647.b\\hfpo717\\14058.d

Injection Date: 14-Sep-2017 14:58:19 Instrument ID: LC_LCMS7

Lims ID: std007

Client ID:

Operator ID: JBH ALS Bottle#: 8 Worklist Smp#: 9

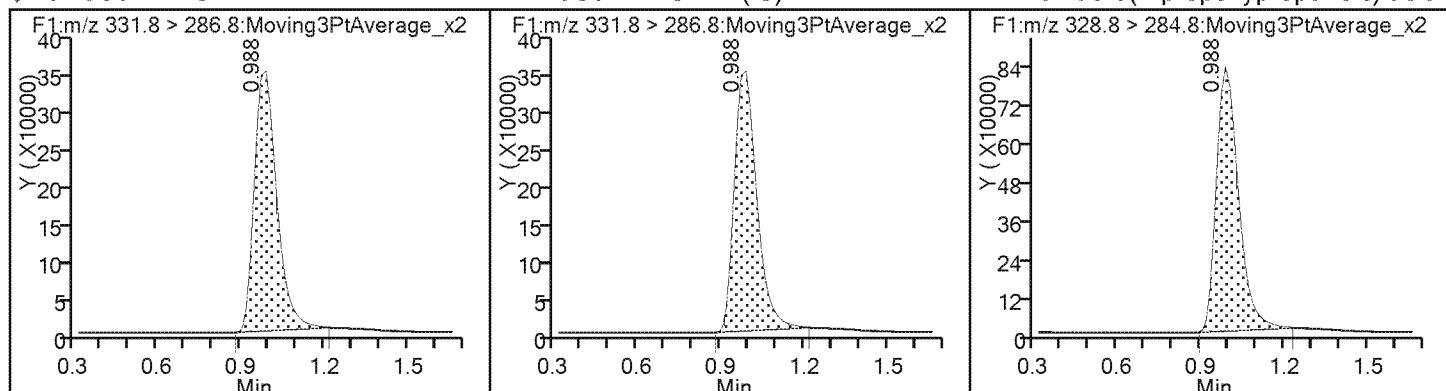
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14059.d
 Lims ID: std008
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 14-Sep-2017 15:01:22 ALS Bottle#: 9 Worklist Smp#: 10
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: L8
 Misc. Info.: HFPO17I14
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 15-Sep-2017 07:29:43 Calib Date: 14-Sep-2017 15:01:22
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14059.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK034

First Level Reviewer: meyera Date: 15-Sep-2017 07:28:32

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

* 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.988 0.981 0.007 1878107 10.0 379

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.988 0.981 0.007 1.000 1878107 9.74 379

1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.988 0.986 0.002 1.000 8293101 48.5 359

Reagents:

HFPO_CAL-8_00030 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20170915-62647.b\\hfp0717\\14059.d

Injection Date: 14-Sep-2017 15:01:22 Instrument ID: LC_LCMS7

Lims ID: std008

Client ID:

Operator ID: JBH

ALS Bottle#: 9 Worklist Smp#: 10

Injection Vol: 10.0 ul

Dil. Factor: 1.0000

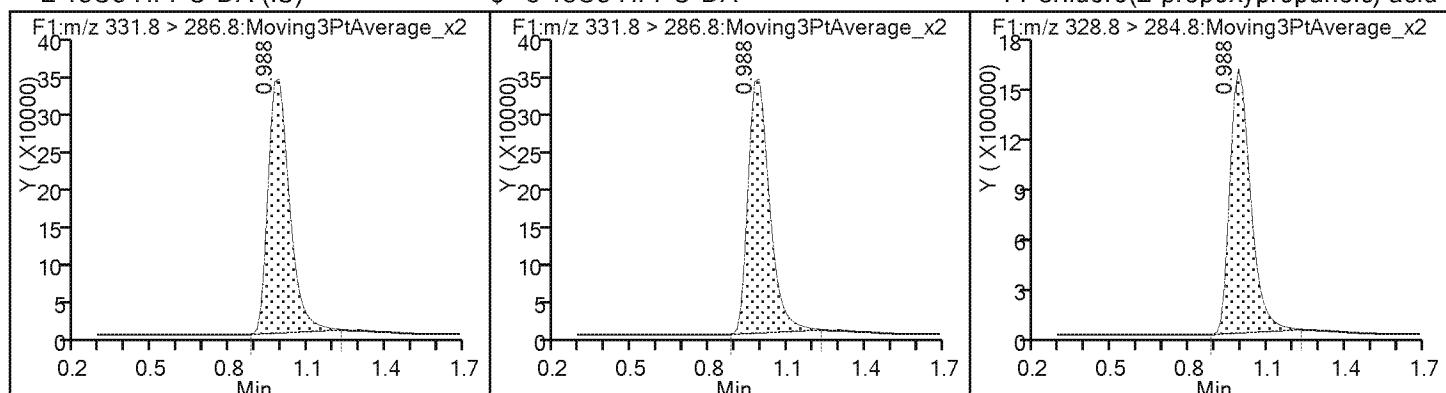
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

* 2 13C3 HFPO-DA (IS)

\$ 3 13C3 HFPO-DA

1 Perfluoro(2-propoxypropanoic) acid



FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-105950-1 Analy Batch No.: 390728

SDG No.: _____

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 09:35 Calibration End Date: 10/10/2017 09:58 Calibration ID: 30558

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-390728/3	hfpo717J10026.d
Level 2	STD002 280-390728/4	hfpo717J10027.d
Level 3	STD003 280-390728/5	hfpo717J10028.d
Level 4	STD004 280-390728/6	hfpo717J10029.d
Level 5	STD005 280-390728/7	hfpo717J10030.d
Level 6	STD006 280-390728/8	hfpo717J10031.d
Level 7	STD007 280-390728/9	hfpo717J10032.d
Level 8	STD008 280-390728/10	hfpo717J10033.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8		RT WINDOW	AVG RT
HFPO-DA	0.893	0.880	0.880	0.880	0.893	0.880	0.880	0.893		0.385 - 1.385	0.885
13C3 HFPO-DA	0.880	0.880	0.880	0.880	0.880	0.880	0.880	0.880		0.380 - 1.380	0.880

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

Analy Batch No.: 390728

SDG No.: _____

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 09:35 Calibration End Date: 10/10/2017 09:58 Calibration ID: 30558

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-390728/3	hfpo717J10026.d
Level 2	STD002 280-390728/4	hfpo717J10027.d
Level 3	STD003 280-390728/5	hfpo717J10028.d
Level 4	STD004 280-390728/6	hfpo717J10029.d
Level 5	STD005 280-390728/7	hfpo717J10030.d
Level 6	STD006 280-390728/8	hfpo717J10031.d
Level 7	STD007 280-390728/9	hfpo717J10032.d
Level 8	STD008 280-390728/10	hfpo717J10033.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4		B	M1	M2								
13C3 HFPO-DA	73075 74460	74523 73194	75043 72919	71803 70142	Ave		73144.6750				2.2	30.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-105950-1 Analy Batch No.: 390728

SDG No.: _____

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 09:35 Calibration End Date: 10/10/2017 09:58 Calibration ID: 30558

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
HFPO-DA	1.6980 1.0102	1.7128 0.9824	1.1896 1.0419	1.1637	1.0154	Lin1	0.2185	1.0121							0.9980		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-105950-1 Analy Batch No.: 390728
 SDG No.: _____
 Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N
 Calibration Start Date: 10/10/2017 09:35 Calibration End Date: 10/10/2017 09:58 Calibration ID: 30558

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-390728/3	hfpo717J10026.d
Level 2	STD002 280-390728/4	hfpo717J10027.d
Level 3	STD003 280-390728/5	hfpo717J10028.d
Level 4	STD004 280-390728/6	hfpo717J10029.d
Level 5	STD005 280-390728/7	hfpo717J10030.d
Level 6	STD006 280-390728/8	hfpo717J10031.d
Level 7	STD007 280-390728/9	hfpo717J10032.d
Level 8	STD008 280-390728/10	hfpo717J10033.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
13C3 HFPO-DA	Ave	730749 731935	745227 729188	750427 701420	718028	744600	10.0 10.0	10.0 10.0	10.0 10.0	10.0	10.0

Curve Type Legend:

Ave = Average

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-105950-1 Analy Batch No.: 390728

SDG No.: _____

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 09:35 Calibration End Date: 10/10/2017 09:58 Calibration ID: 30558

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-390728/3	hfpo717J10026.d
Level 2	STD002 280-390728/4	hfpo717J10027.d
Level 3	STD003 280-390728/5	hfpo717J10028.d
Level 4	STD004 280-390728/6	hfpo717J10029.d
Level 5	STD005 280-390728/7	hfpo717J10030.d
Level 6	STD006 280-390728/8	hfpo717J10031.d
Level 7	STD007 280-390728/9	hfpo717J10032.d
Level 8	STD008 280-390728/10	hfpo717J10033.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
HFPO-DA	13CP ODA	Lin1	31020 739399	63823 1790812	89272 3654104	167109	378047	0.250 10.0	0.500 25.0	1.00 50.0	2.00	5.00

Curve Type Legend:

Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10026.d
 Lims ID: std001
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 10-Oct-2017 09:35:28 ALS Bottle#: 2 Worklist Smp#: 3
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L1
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:51:45 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:50:42

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.880 0.880 0.0 1.000 730749 10.0 397
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.880 0.880 0.0 1.000 730749 10.0 397
 1 Perfluoro(2-propoxypropanoic) acid M
 328.8 > 284.8 0.893 0.885 0.008 1.000 31020 0.2036 14.1 M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HFPO_CAL-1_00031 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20171010-63483.b\\hfp0717J10026.d

Injection Date: 10-Oct-2017 09:35:28

Instrument ID: LC_LCMS7

Lims ID: std001

Client ID:

Operator ID: JBH

ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

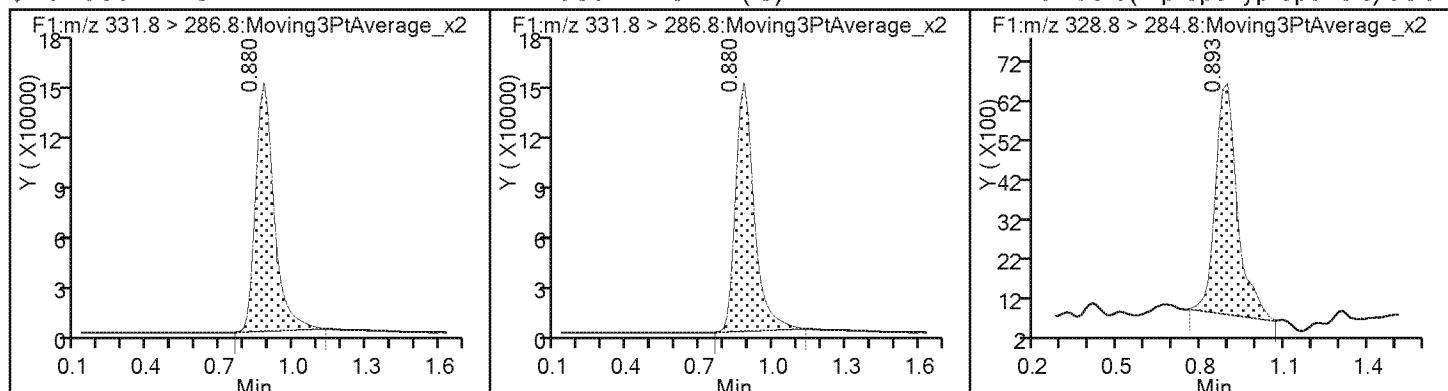
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (M)



TestAmerica Denver

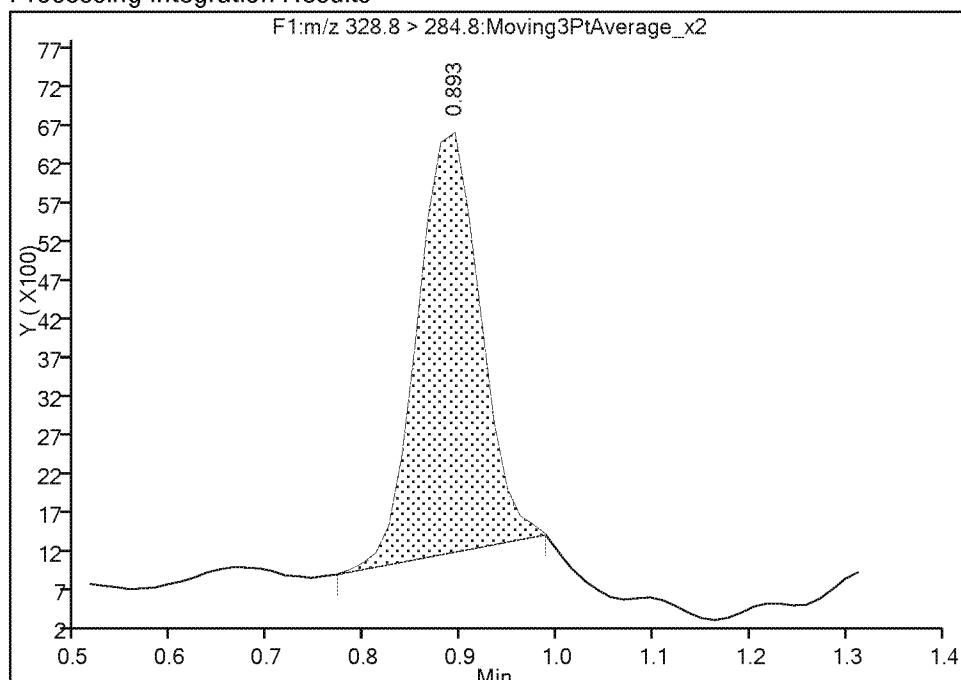
Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20171010-63483.b\\hfpo717J10026.d
 Injection Date: 10-Oct-2017 09:35:28 Instrument ID: LC_LCMS7
 Lims ID: std001
 Client ID:
 Operator ID: JBH ALS Bottle#: 2 Worklist Smp#: 3
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

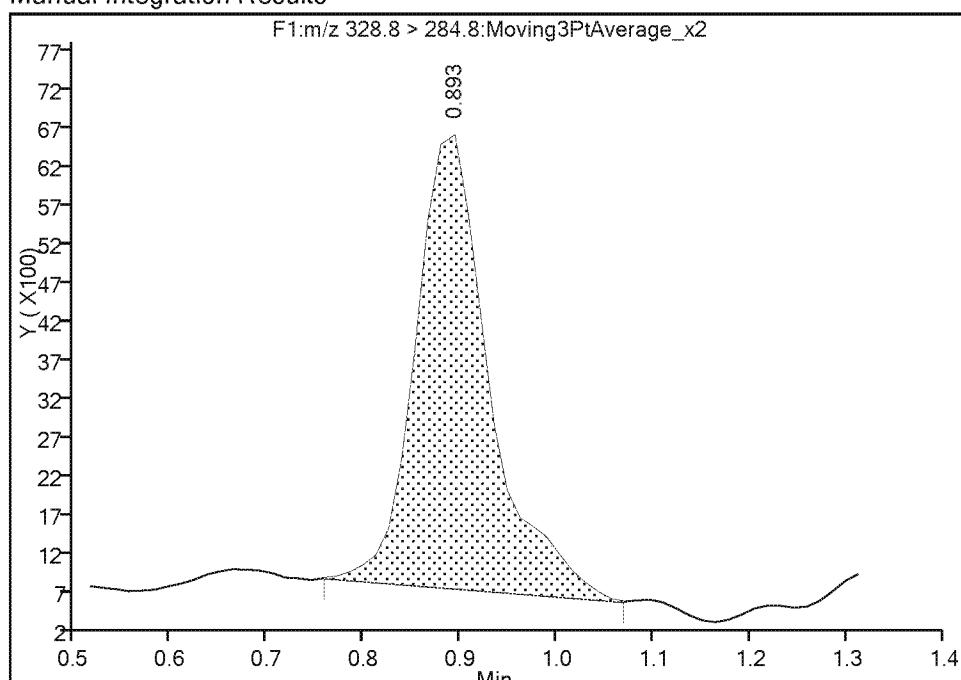
RT: 0.89
 Area: 24407
 Amount: 0.162386
 Amount Units: ug/l

Processing Integration Results



RT: 0.89
 Area: 31020
 Amount: 0.203553
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 10-Oct-2017 11:50:40

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10027.d
 Lims ID: std002
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 10-Oct-2017 09:38:42 ALS Bottle#: 3 Worklist Smp#: 4
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L2
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:51:46 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:50:49

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

* 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.880 0.880 0.0 745227 10.0 452
 \$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.880 0.880 0.0 1.000 745227 10.2 452
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.880 0.885 -0.005 1.000 63823 0.6303 36.5

Reagents:

HFPO_CAL-2_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20171010-63483.b\\hfp0717J10027.d

Injection Date: 10-Oct-2017 09:38:42 Instrument ID: LC_LCMS7

Lims ID: std002

Client ID:

Operator ID: JBH ALS Bottle#: 3 Worklist Smp#: 4

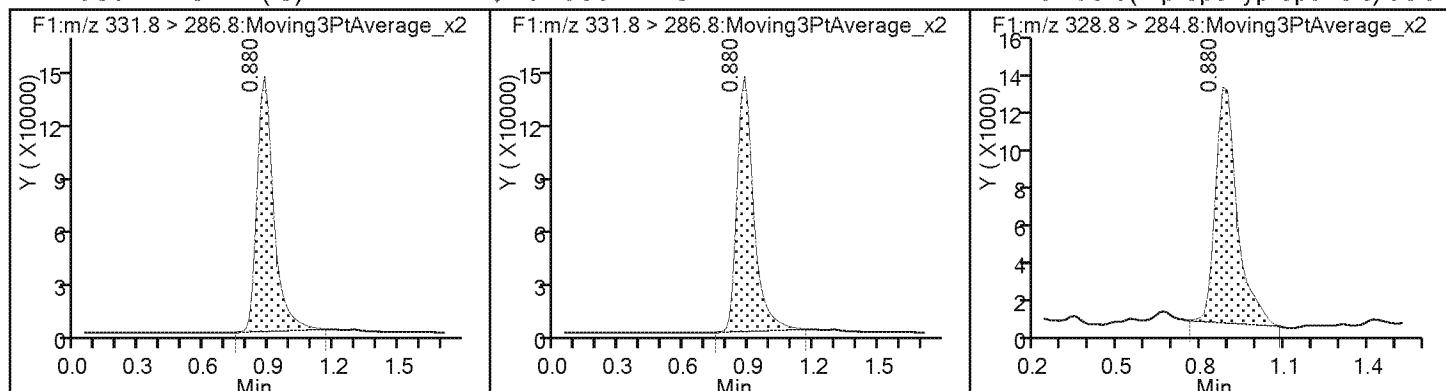
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

* 2 13C3 HFPO-DA (IS)

\$ 3 13C3 HFPO-DA

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10028.d
 Lims ID: std003
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 10-Oct-2017 09:41:56 ALS Bottle#: 4 Worklist Smp#: 5
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L3
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:51:47 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:50:52

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA

331.8 > 286.8 0.880 0.880 0.0 1.000 750427 10.3 417

* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 0.880 0.880 0.0 750427 10.0 417

1 Perfluoro(2-propoxypropanoic) acid

328.8 > 284.8 0.880 0.885 -0.005 1.000 89272 0.9595 50.3

Reagents:

HFPO_CAL-3_00031 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20171010-63483.b\\hfp0717J10028.d

Injection Date: 10-Oct-2017 09:41:56

Instrument ID: LC_LCMS7

Lims ID: std003

Client ID:

Operator ID: JBH

ALS Bottle#: 4 Worklist Smp#: 5

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

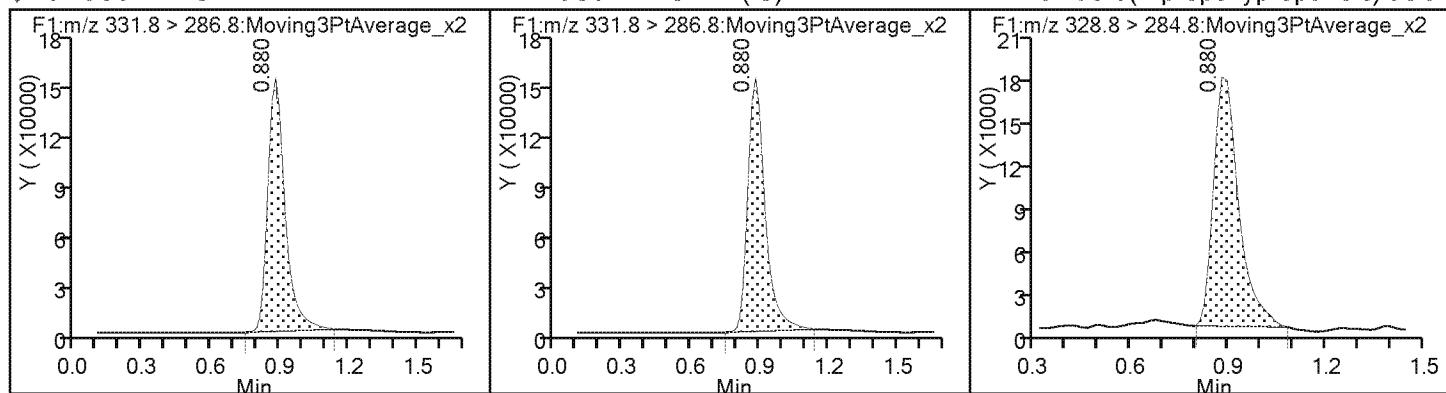
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10029.d
 Lims ID: std004
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 10-Oct-2017 09:45:11 ALS Bottle#: 5 Worklist Smp#: 6
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L4
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:51:47 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:50:55

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 0.880 0.880 0.0 718028 10.0 438

\$ 3 13C3 HFPO-DA

331.8 > 286.8 0.880 0.880 0.0 1.000 718028 9.82 438

1 Perfluoro(2-propoxypropanoic) acid

328.8 > 284.8 0.880 0.885 -0.005 1.000 167109 2.08 143

Reagents:

HFPO_CAL-4_00031 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20171010-63483.b\\hfp0717J10029.d

Injection Date: 10-Oct-2017 09:45:11 Instrument ID: LC_LCMS7

Lims ID: std004

Client ID:

Operator ID: JBH ALS Bottle#: 5 Worklist Smp#: 6

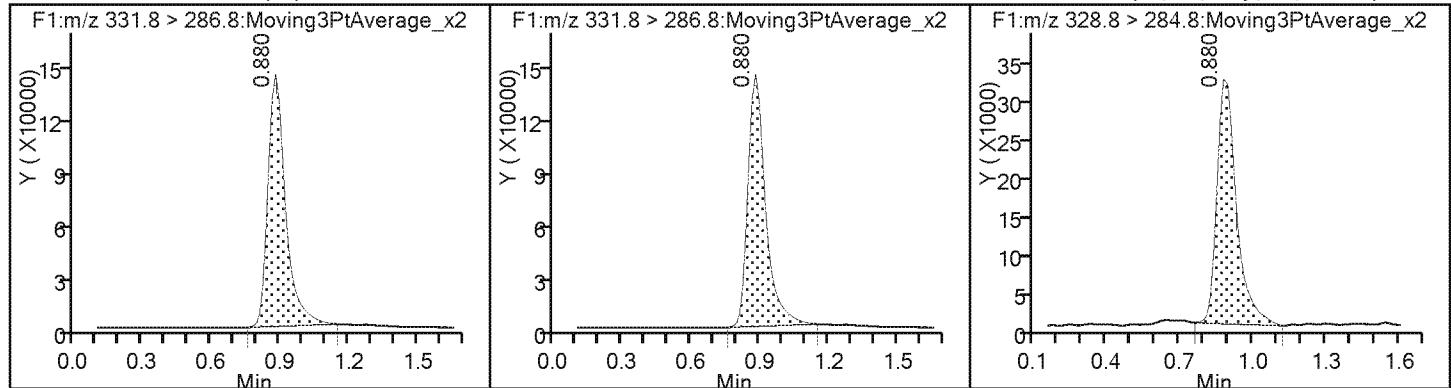
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

* 2 13C3 HFPO-DA (IS)

\$ 3 13C3 HFPO-DA

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10030.d
 Lims ID: std005
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 10-Oct-2017 09:48:25 ALS Bottle#: 6 Worklist Smp#: 7
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L5
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:51:48 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:50:57

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
331.8 > 286.8 0.880 0.880 0.0 1.000 744600 10.2 433

* 2 13C3 HFPO-DA (IS)
331.8 > 286.8 0.880 0.880 0.0 1.000 744600 10.0 433

1 Perfluoro(2-propoxypropanoic) acid
328.8 > 284.8 0.893 0.885 0.008 1.000 378047 4.80 223

Reagents:

HFPO_CAL-5_00070 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20171010-63483.b\\hfp0717J10030.d

Injection Date: 10-Oct-2017 09:48:25 Instrument ID: LC_LCMS7

Lims ID: std005

Client ID:

Operator ID: JBH ALS Bottle#: 6 Worklist Smp#: 7

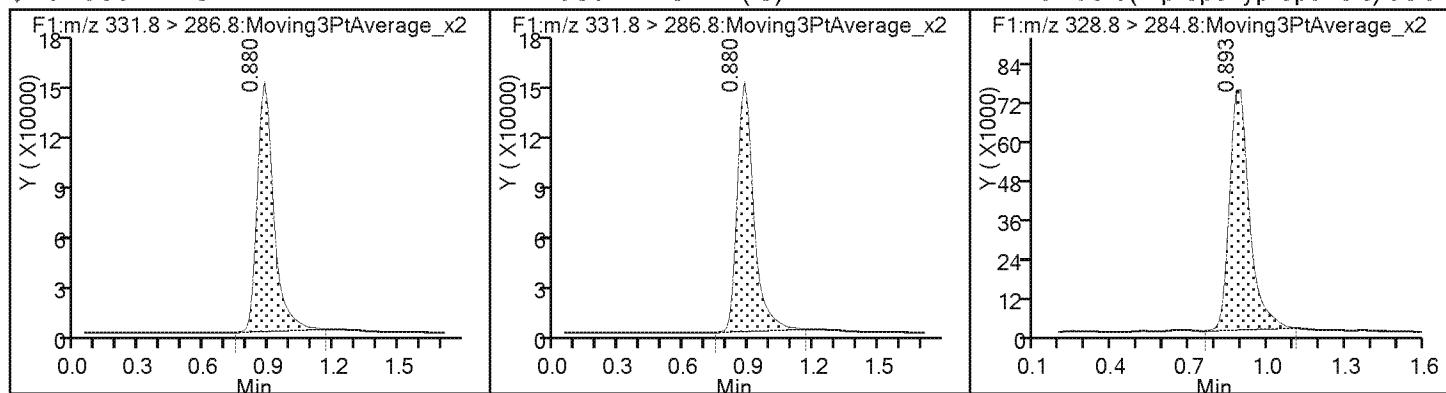
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10031.d
 Lims ID: std006
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 10-Oct-2017 09:51:39 ALS Bottle#: 7 Worklist Smp#: 8
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L6
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:51:49 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:51:00

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

* 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.880 0.880 0.0 731935 10.0 379
 \$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.880 0.880 0.0 1.000 731935 10.0 379
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.880 0.885 -0.005 1.000 739399 9.77 298

Reagents:

HFPO_CAL-6_00070 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20171010-63483.b\\hfp0717J10031.d

Injection Date: 10-Oct-2017 09:51:39 Instrument ID: LC_LCMS7

Lims ID: std006

Client ID:

Operator ID: JBH ALS Bottle#: 7 Worklist Smp#: 8

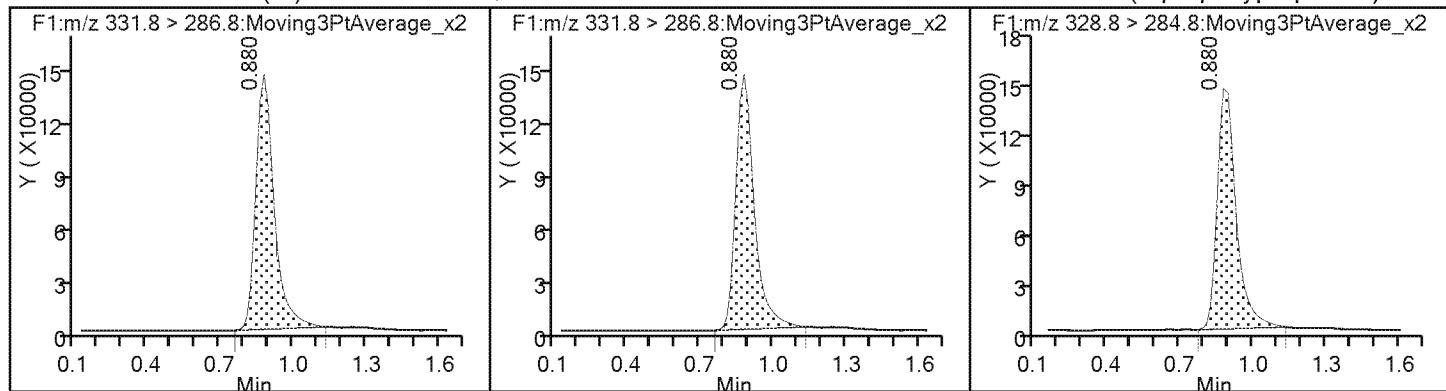
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

* 2 13C3 HFPO-DA (IS)

\$ 3 13C3 HFPO-DA

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10032.d
 Lims ID: std007
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 10-Oct-2017 09:54:53 ALS Bottle#: 8 Worklist Smp#: 9
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L7
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:51:50 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:51:04

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.880 0.880 0.0 1.000 729188 9.97 404
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.880 0.880 0.0 1.000 729188 10.0 404
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.880 0.885 -0.005 1.000 1790812 24.0 386

Reagents:

HFPO_CAL-7_00031 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20171010-63483.b\\hfp0717J10032.d

Injection Date: 10-Oct-2017 09:54:53 Instrument ID: LC_LCMS7

Lims ID: std007

Client ID:

Operator ID: JBH

ALS Bottle#: 8 Worklist Smp#: 9

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

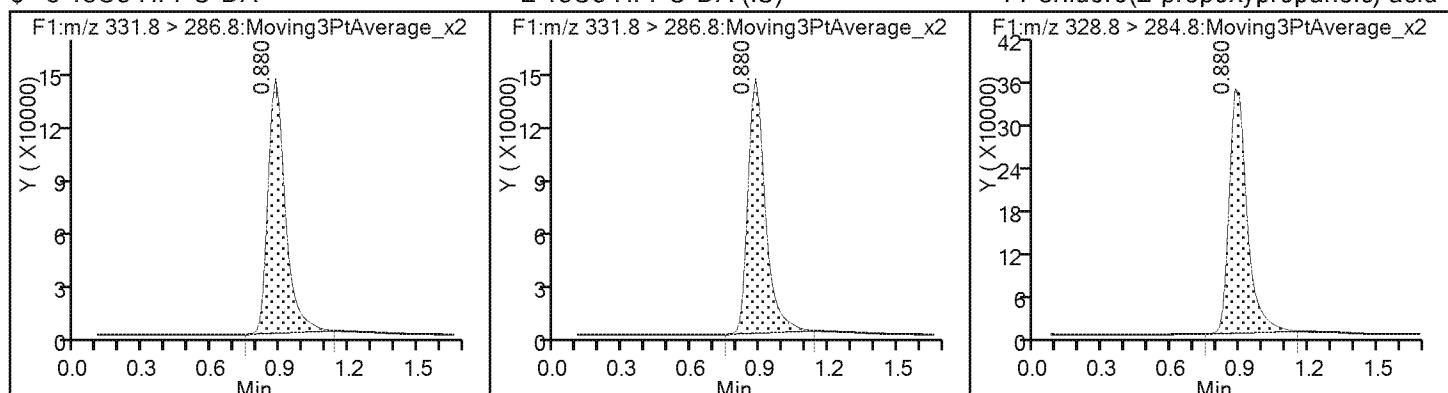
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d
 Lims ID: std008
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 10-Oct-2017 09:58:07 ALS Bottle#: 9 Worklist Smp#: 10
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L8
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:51:51 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:51:08

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 0.880 0.880 0.0 701420 10.0 373

\$ 3 13C3 HFPO-DA

331.8 > 286.8 0.880 0.880 0.0 1.000 701420 9.59 373

1 Perfluoro(2-propoxypropanoic) acid

328.8 > 284.8 0.893 0.885 0.008 1.000 3654104 51.3 421

Reagents:

HFPO_CAL-8_00031 Amount Added: 1.00 Units: mL

Report Date: 10-Oct-2017 12:51:51

Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20171010-63483.b\\hfp0717J10033.d

Injection Date: 10-Oct-2017 09:58:07

Instrument ID: LC_LCMS7

Lims ID: std008

Client ID:

Operator ID: JBH

ALS Bottle#: 9 Worklist Smp#: 10

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

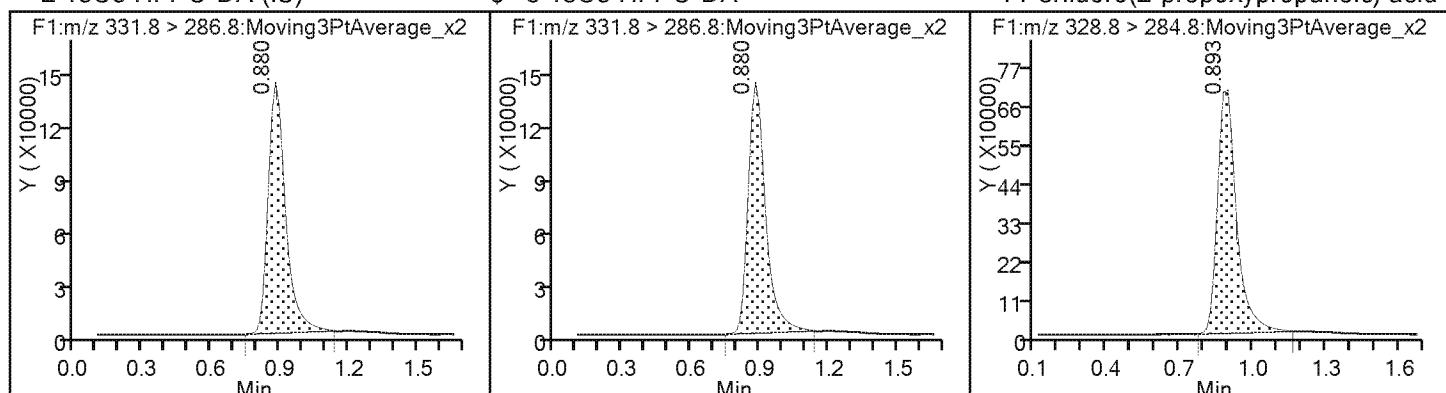
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

* 2 13C3 HFPO-DA (IS)

\$ 3 13C3 HFPO-DA

1 Perfluoro(2-propoxypropanoic) acid



FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-105950-1 Analy Batch No.: 404345
SDG No.: _____
Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N
Calibration Start Date: 02/08/2018 13:05 Calibration End Date: 02/08/2018 13:31 Calibration ID: 31612

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-404345/3	hfpo718B08034.d
Level 2	STD002 280-404345/4	hfpo718B08035.d
Level 3	STD003 280-404345/5	hfpo718B08036.d
Level 4	STD004 280-404345/6	hfpo718B08037.d
Level 5	STD005 280-404345/7	hfpo718B08038.d
Level 6	STD006 280-404345/8	hfpo718B08039.d
Level 7	STD007 280-404345/9	hfpo718B08040.d
Level 8	STD008 280-404345/10	hfpo718B08041.d
Level 9	STD009 280-404345/11	hfpo718B08042.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9	RT WINDOW	AVG RT
HFPO-DA	1.056	1.056	1.056	1.056	1.056	1.056	1.056	1.056	1.056	0.556 - 1.556	1.056
13C3 HFPO-DA	1.042	1.042	1.042	1.042	1.042	1.042	1.042	1.056	1.056	0.545 - 1.545	1.045

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-105950-1 Analy Batch No.: 404345

SDG No.: _____

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2018 13:05 Calibration End Date: 02/08/2018 13:31 Calibration ID: 31612

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-404345/3	hfpo718B08034.d
Level 2	STD002 280-404345/4	hfpo718B08035.d
Level 3	STD003 280-404345/5	hfpo718B08036.d
Level 4	STD004 280-404345/6	hfpo718B08037.d
Level 5	STD005 280-404345/7	hfpo718B08038.d
Level 6	STD006 280-404345/8	hfpo718B08039.d
Level 7	STD007 280-404345/9	hfpo718B08040.d
Level 8	STD008 280-404345/10	hfpo718B08041.d
Level 9	STD009 280-404345/11	hfpo718B08042.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4		B	M1	M2								
13C3 HFPO-DA	75771 75244 71284	75964 75940	72010 75039	77000 73687	Ave		74659.8778				2.6		30.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-105950-1 Analy Batch No.: 404345

SDG No.: _____

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2018 13:05 Calibration End Date: 02/08/2018 13:31 Calibration ID: 31612

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
HFPO-DA	1.1630 1.1128	1.1250 1.0911	1.0756 1.0665	1.0527 1.0507	1.1211	Lin1	0.0361	1.0638							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-105950-1 Analy Batch No.: 404345

SDG No.: _____

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2018 13:05 Calibration End Date: 02/08/2018 13:31 Calibration ID: 31612

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-404345/3	hfpo718B08034.d
Level 2	STD002 280-404345/4	hfpo718B08035.d
Level 3	STD003 280-404345/5	hfpo718B08036.d
Level 4	STD004 280-404345/6	hfpo718B08037.d
Level 5	STD005 280-404345/7	hfpo718B08038.d
Level 6	STD006 280-404345/8	hfpo718B08039.d
Level 7	STD007 280-404345/9	hfpo718B08040.d
Level 8	STD008 280-404345/10	hfpo718B08041.d
Level 9	STD009 280-404345/11	hfpo718B08042.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
13C3 HFPO-DA	Ave	757714 759397	759642 750388	720099 736869	769995 712841	752444	10.0 10.0	10.0 10.0	10.0 10.0	10.0 10.0	10.0

Curve Type Legend:

Ave = Average

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-105950-1 Analy Batch No.: 404345

SDG No.: _____

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2018 13:05 Calibration End Date: 02/08/2018 13:31 Calibration ID: 31612

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-404345/3	hfpo718B08034.d
Level 2	STD002 280-404345/4	hfpo718B08035.d
Level 3	STD003 280-404345/5	hfpo718B08036.d
Level 4	STD004 280-404345/6	hfpo718B08037.d
Level 5	STD005 280-404345/7	hfpo718B08038.d
Level 6	STD006 280-404345/8	hfpo718B08039.d
Level 7	STD007 280-404345/9	hfpo718B08040.d
Level 8	STD008 280-404345/10	hfpo718B08041.d
Level 9	STD009 280-404345/11	hfpo718B08042.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
HFPO-DA	13CP ODA	Lin1	22031 845082	42730 2046873	77455 3929397	162117 7489478	421775	0.250 10.0	0.500 25.0	1.00 50.0	2.00 100	5.00

Curve Type Legend:

Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08034.d
 Lims ID: std001
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 08-Feb-2018 13:05:38 ALS Bottle#: 2 Worklist Smp#: 3
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L1
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:13 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:04

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

* 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.042 1.045 -0.003 757714 10.0 1562
 \$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.042 1.045 -0.003 1.000 757714 10.1 1562
 1 Perfluoro(2-propoxypropanoic) acid M
 328.8 > 284.8 1.056 1.056 0.0 1.000 22031 0.2394 4.4 M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HFPO_CAL-1_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08034.d

Injection Date: 08-Feb-2018 13:05:38

Instrument ID: LC_LCMS7

Lims ID: std001

Client ID:

Operator ID: JBH

ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

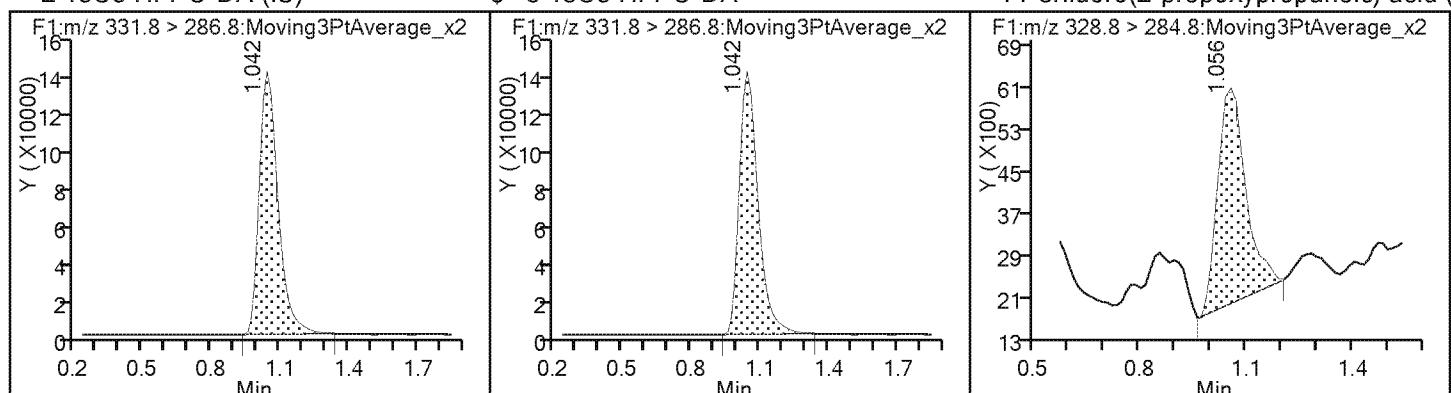
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

* 2 13C3 HFPO-DA (IS)

\$ 3 13C3 HFPO-DA

1 Perfluoro(2-propoxypropanoic) acid (M)



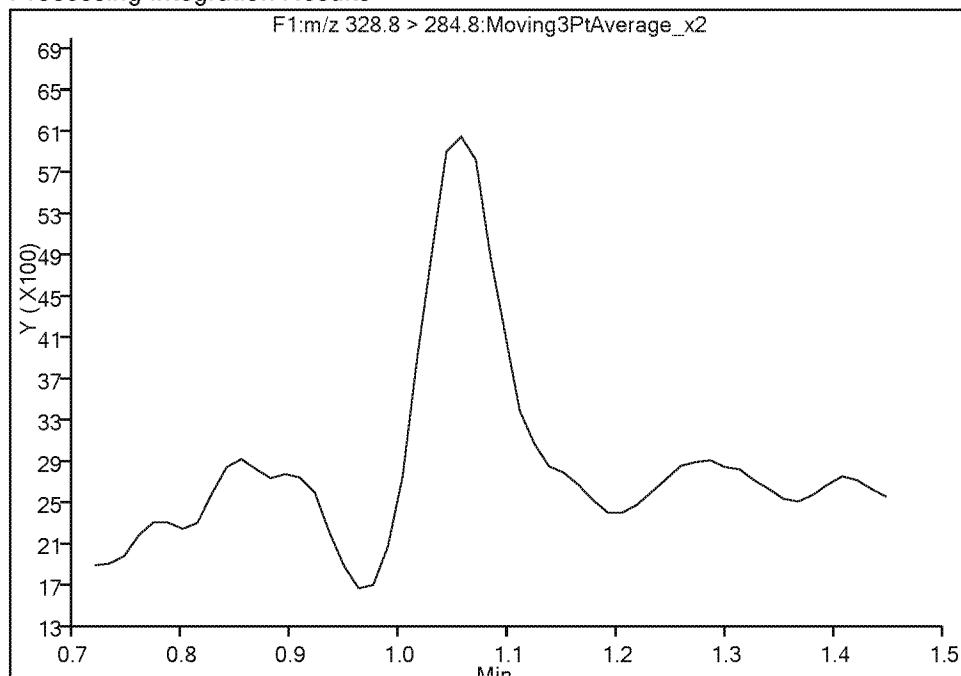
TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08034.d
 Injection Date: 08-Feb-2018 13:05:38 Instrument ID: LC_LCMS7
 Lims ID: std001
 Client ID:
 Operator ID: JBH ALS Bottle#: 2 Worklist Smp#: 3
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6
 Signal: 1

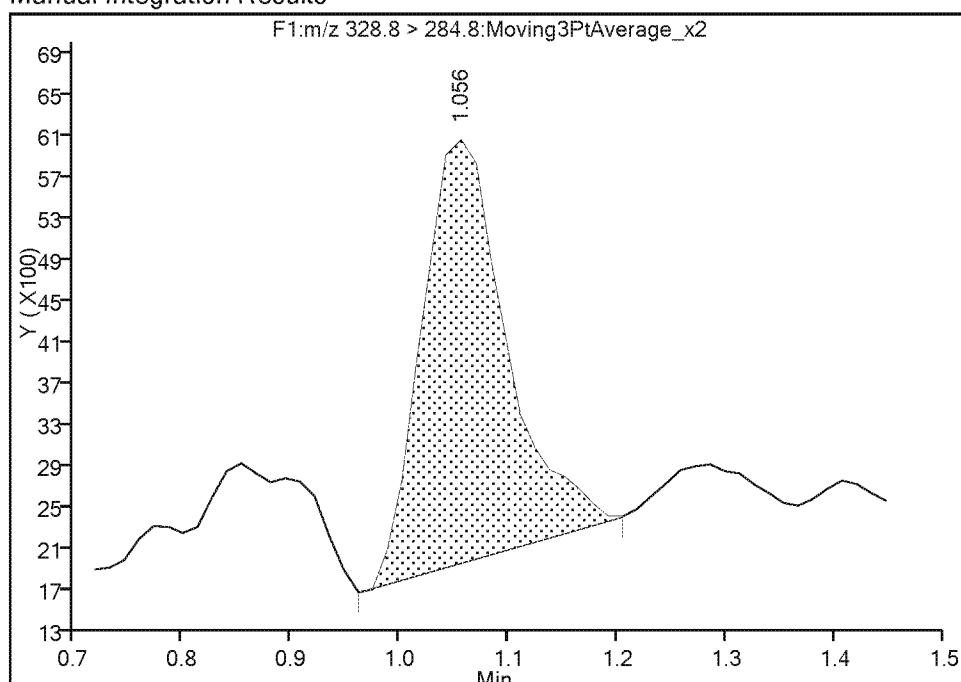
Not Detected
 Expected RT: 1.06

Processing Integration Results



RT: 1.06
 Area: 22031
 Amount: 0.239356
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 08-Feb-2018 15:19:01

Audit Action: Manually Integrated

Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08035.d
 Lims ID: std002
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 08-Feb-2018 13:08:52 ALS Bottle#: 3 Worklist Smp#: 4
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L2
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:14 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:16

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.042 1.045 -0.003 1.000 759642 10.2 1267
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.042 1.045 -0.003 1.000 759642 10.0 1267
 1 Perfluoro(2-propoxypropanoic) acid M
 328.8 > 284.8 1.056 1.056 0.0 1.000 42730 0.4948 6.5 M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HFPO_CAL-2_00033 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08035.d

Injection Date: 08-Feb-2018 13:08:52 Instrument ID: LC_LCMS7

Lims ID: std002

Client ID:

Operator ID: JBH ALS Bottle#: 3 Worklist Smp#: 4

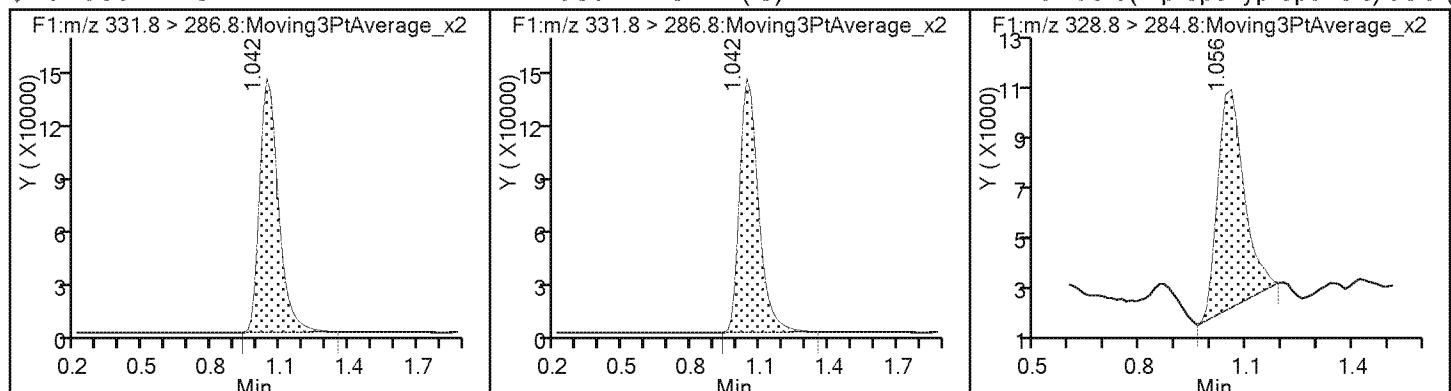
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (M)



TestAmerica Denver

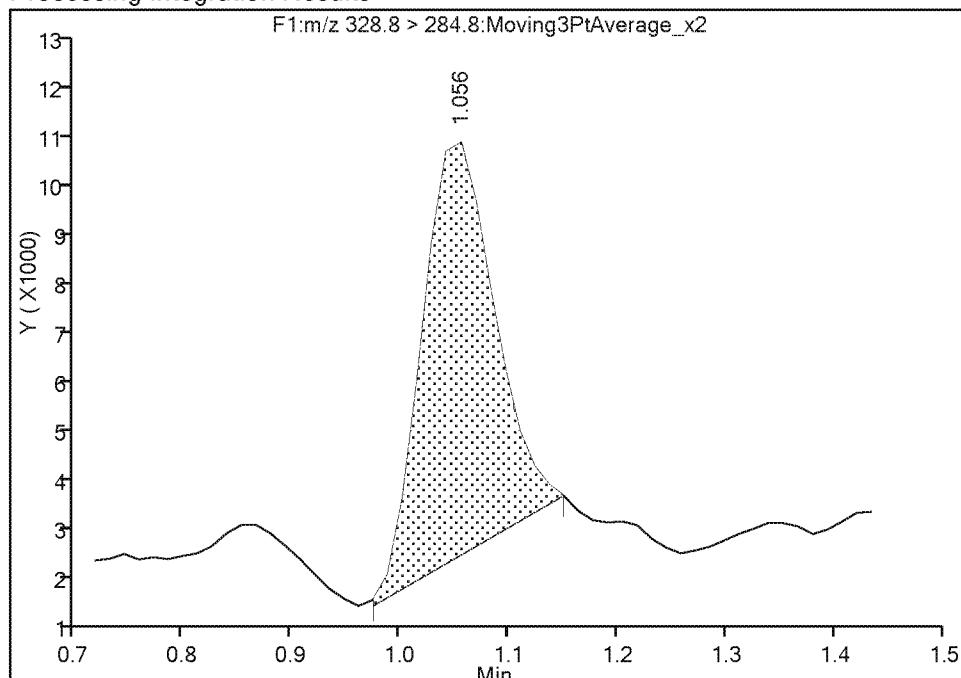
Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08035.d
 Injection Date: 08-Feb-2018 13:08:52 Instrument ID: LC_LCMS7
 Lims ID: std002
 Client ID:
 Operator ID: JBH ALS Bottle#: 3 Worklist Smp#: 4
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

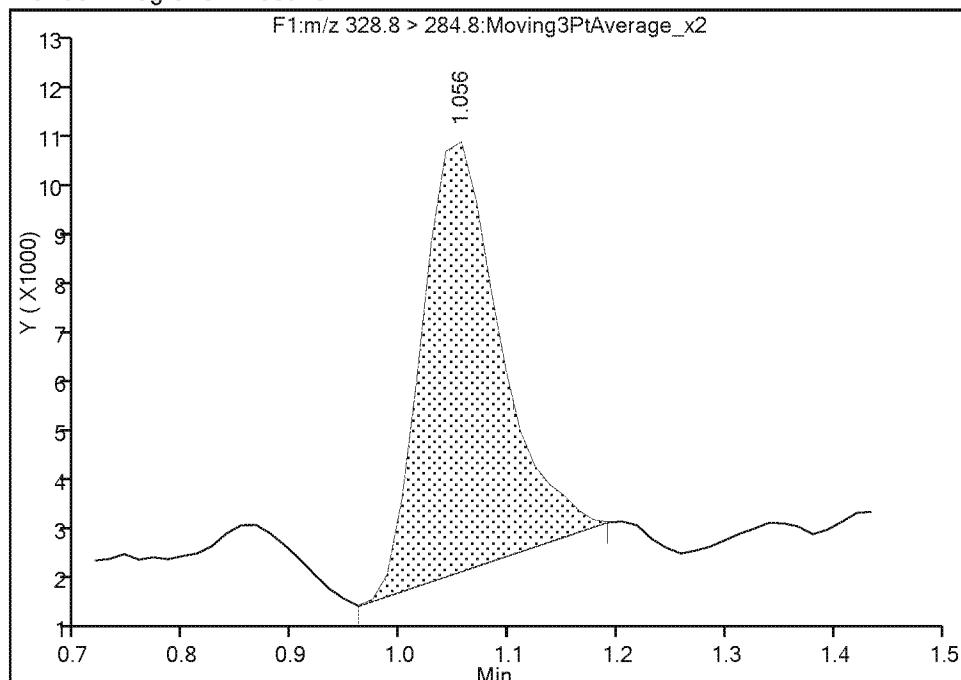
Processing Integration Results

RT: 1.06
 Area: 38092
 Amount: 0.452274
 Amount Units: ug/l



Manual Integration Results

RT: 1.06
 Area: 42730
 Amount: 0.494804
 Amount Units: ug/l



Reviewer: meyera, 08-Feb-2018 15:19:12

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08036.d
 Lims ID: std003
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 08-Feb-2018 13:12:06 ALS Bottle#: 4 Worklist Smp#: 5
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L3
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:14 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:19

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 1.042 1.045 -0.003 720099 10.0 956

\$ 3 13C3 HFPO-DA

331.8 > 286.8 1.042 1.045 -0.003 1.000 720099 9.65 956

1 Perfluoro(2-propoxypropanoic) acid

328.8 > 284.8 1.056 1.056 0.0 1.000 77455 0.9771 10.6

Reagents:

HFPO_CAL-3_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08036.d

Injection Date: 08-Feb-2018 13:12:06

Instrument ID: LC_LCMS7

Lims ID: std003

Client ID:

Operator ID: JBH

ALS Bottle#: 4 Worklist Smp#: 5

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

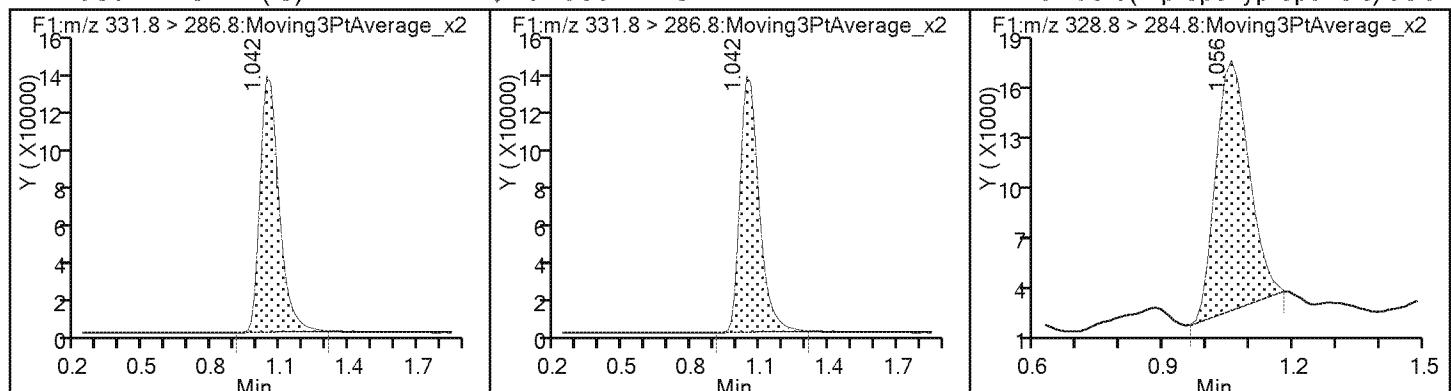
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

* 2 13C3 HFPO-DA (IS)

\$ 3 13C3 HFPO-DA

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08037.d
 Lims ID: std004
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 08-Feb-2018 13:15:21 ALS Bottle#: 5 Worklist Smp#: 6
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L4
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:15 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:22

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.042 1.045 -0.003 1.000 769995 10.3 1154
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.042 1.045 -0.003 1.000 769995 10.0 1154
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 1.056 1.056 0.0 1.000 162117 1.95 26.1

Reagents:

HFPO_CAL-4_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08037.d

Injection Date: 08-Feb-2018 13:15:21

Instrument ID: LC_LCMS7

Lims ID: std004

Client ID:

Operator ID: JBH

ALS Bottle#: 5 Worklist Smp#: 6

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

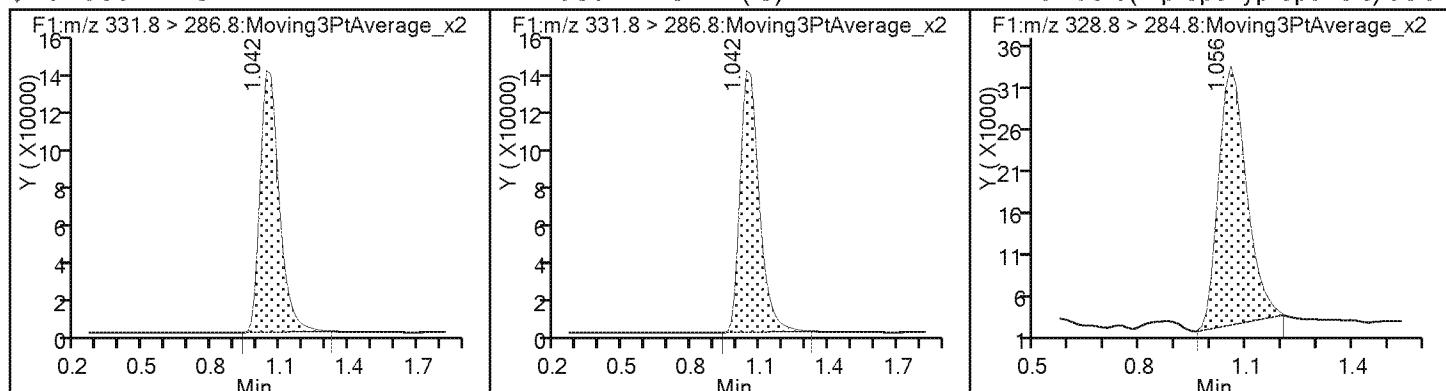
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08038.d
 Lims ID: std005
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 08-Feb-2018 13:18:35 ALS Bottle#: 6 Worklist Smp#: 7
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L5
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:15 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:24

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

* 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.042 1.045 -0.003 752444 10.0 1072
 \$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.042 1.045 -0.003 1.000 752444 10.1 1072
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 1.056 1.056 0.0 1.000 421775 5.24 66.0

Reagents:

HFPO_CAL-5_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08038.d

Injection Date: 08-Feb-2018 13:18:35

Instrument ID: LC_LCMS7

Lims ID: std005

Client ID:

Operator ID: JBH

ALS Bottle#: 6 Worklist Smp#: 7

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

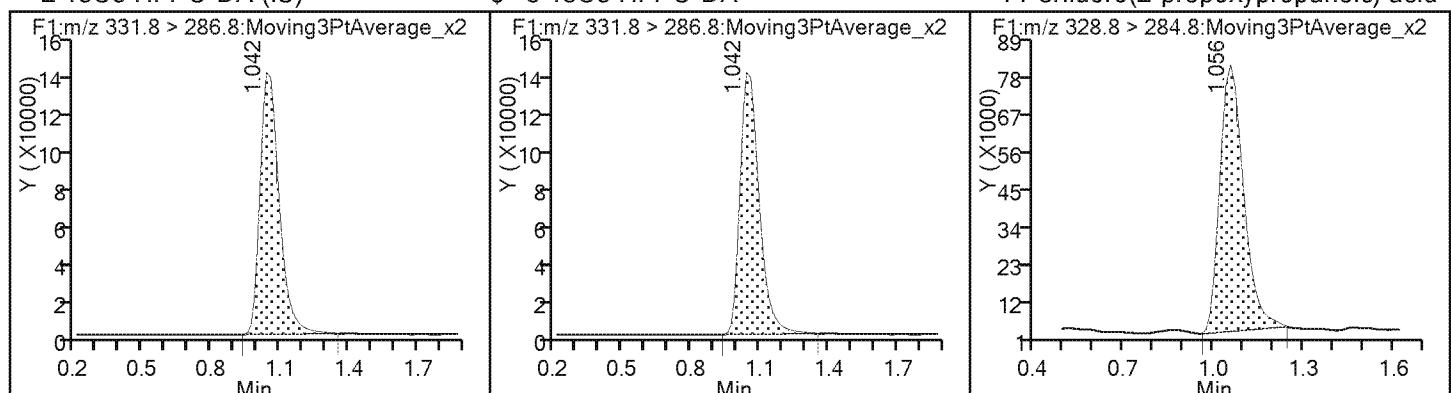
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

* 2 13C3 HFPO-DA (IS)

\$ 3 13C3 HFPO-DA

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08039.d
 Lims ID: std006
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 08-Feb-2018 13:21:49 ALS Bottle#: 7 Worklist Smp#: 8
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L6
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:16 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:26

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.042 1.045 -0.003 1.000 759397 10.2 1193
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.042 1.045 -0.003 1.000 759397 10.0 1193
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 1.056 1.056 0.0 1.000 845082 10.4 146

Reagents:

HFPO_CAL-6_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08039.d

Injection Date: 08-Feb-2018 13:21:49

Instrument ID: LC_LCMS7

Lims ID: std006

Client ID:

Operator ID: JBH

ALS Bottle#: 7 Worklist Smp#: 8

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

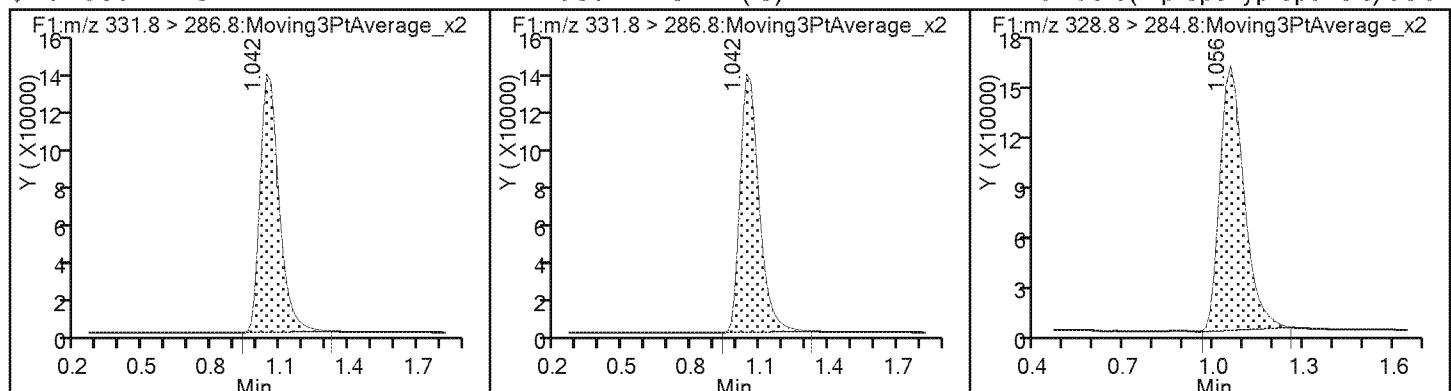
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08040.d
 Lims ID: std007
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 08-Feb-2018 13:25:03 ALS Bottle#: 8 Worklist Smp#: 9
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L7
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:16 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:28

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

* 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.042 1.045 -0.003 750388 10.0 1247
 \$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.042 1.045 -0.003 1.000 750388 10.1 1247
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 1.056 1.056 0.0 1.000 2046873 25.6 246

Reagents:

HFPO_CAL-7_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08040.d

Injection Date: 08-Feb-2018 13:25:03

Instrument ID: LC_LCMS7

Lims ID: std007

Client ID:

Operator ID: JBH

ALS Bottle#: 8 Worklist Smp#: 9

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

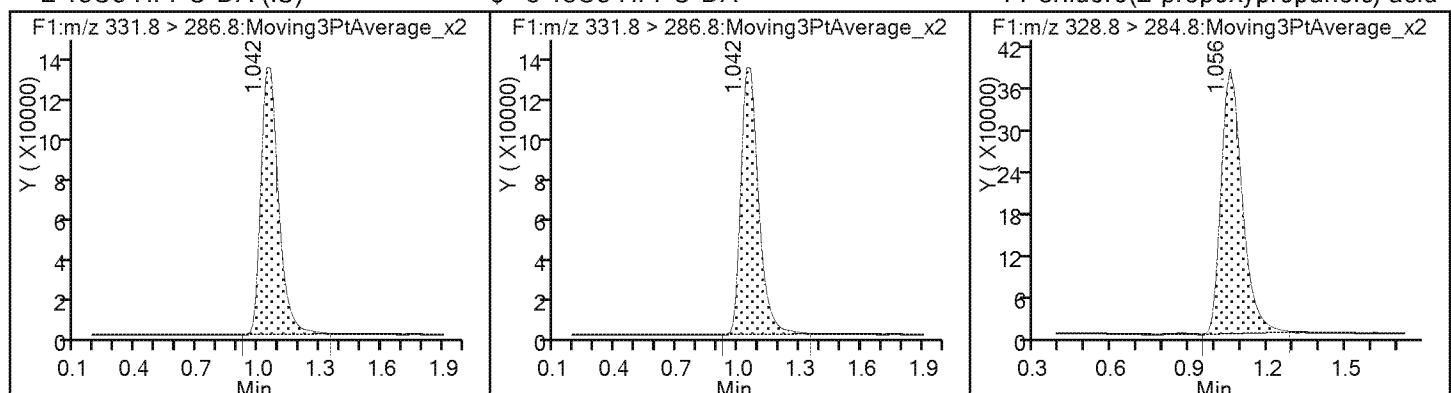
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

* 2 13C3 HFPO-DA (IS)

\$ 3 13C3 HFPO-DA

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08041.d
 Lims ID: std008
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 08-Feb-2018 13:28:18 ALS Bottle#: 9 Worklist Smp#: 10
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L8
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:17 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:30

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.056 1.045 0.011 1.000 736869 9.87 1055
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.056 1.045 0.011 1.000 736869 10.0 1055
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 1.056 1.056 0.0 1.000 3929397 50.1 416

Reagents:

HFPO_CAL-8_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08041.d

Injection Date: 08-Feb-2018 13:28:18

Instrument ID: LC_LCMS7

Lims ID: std008

Client ID:

Operator ID: JBH

ALS Bottle#: 9 Worklist Smp#: 10

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

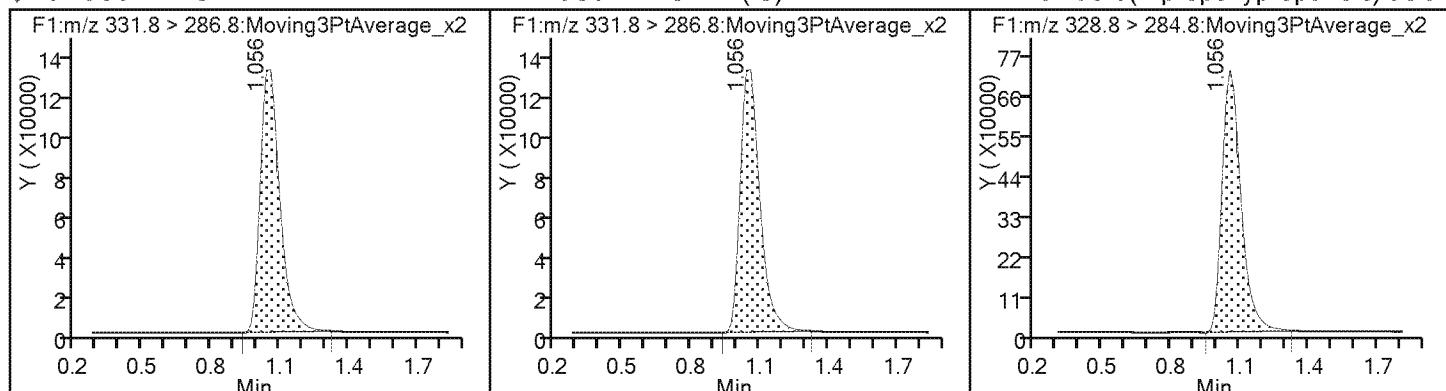
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d
 Lims ID: std009
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 08-Feb-2018 13:31:32 ALS Bottle#: 10 Worklist Smp#: 11
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: L9
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:17 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:38

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

* 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.056 1.045 0.011 712841 10.0 1141
 \$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.056 1.045 0.011 1.000 712841 9.55 1141
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 1.056 1.056 0.0 1.000 7489478 98.7 561

Reagents:

HFPO_CAL-9_00001 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08042.d

Injection Date: 08-Feb-2018 13:31:32

Instrument ID: LC_LCMS7

Lims ID: std009

Client ID:

Operator ID: JBH

ALS Bottle#: 10 Worklist Smp#: 11

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

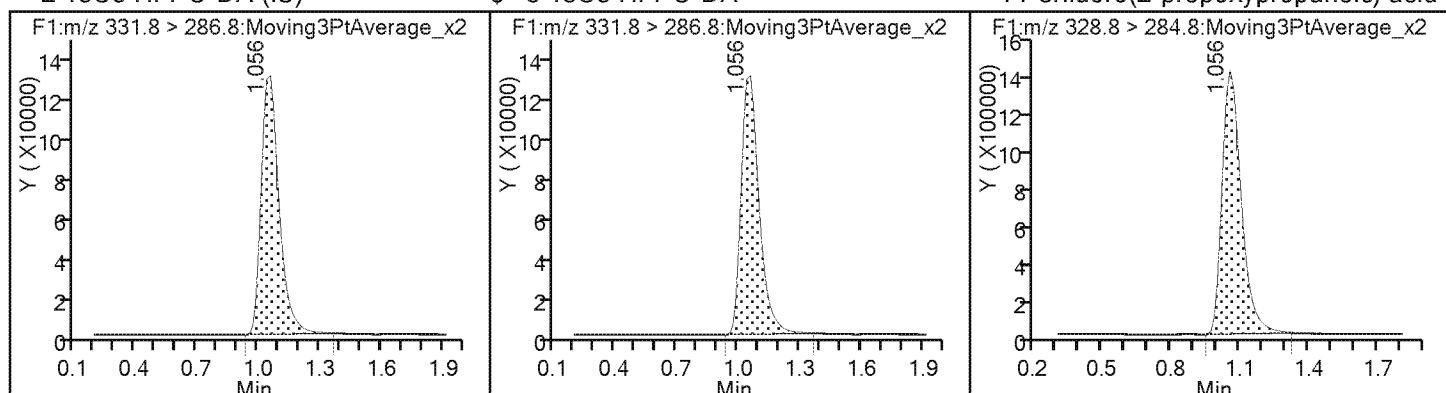
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

* 2 13C3 HFPO-DA (IS)

\$ 3 13C3 HFPO-DA

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: ICV 280-387775/13

Calibration Date: 09/14/2017 15:10

Instrument ID: LC_LCMS7

Calib Start Date: 09/14/2017 14:40

GC Column: Synergi Hydro ID:

Calib End Date: 09/14/2017 15:01

Lab File ID: hfpo717II14062.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro(2-propoxypropanoic acid	Lin1		0.9462		1.89	2.00	-5.3	20.0
13C3 HFPO-DA	Ave	192740	197806		10.3	10.0	2.6	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14062.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 14-Sep-2017 15:10:31 ALS Bottle#: 10 Worklist Smp#: 13
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: HFPO17I14
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist:
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 15-Sep-2017 07:29:44 Calib Date: 14-Sep-2017 15:01:22
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20170915-62647.b\hfpo717I14059.d

Column 1 : Det: F1:MRM

Process Host: XAWRK034

First Level Reviewer: meyera Date: 15-Sep-2017 07:28:43

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.988 0.981 0.007 1.000 1978058 10.3 436
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.988 0.981 0.007 1.000 1978058 10.0 436
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.988 0.986 0.002 1.000 374307 1.89 162

Reagents:

HFPO_ICV_00031 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20170915-62647.b\\hfp0717\\14062.d

Injection Date: 14-Sep-2017 15:10:31 Instrument ID: LC_LCMS7

Lims ID: ICV

Client ID:

Operator ID: JBH ALS Bottle#: 10 Worklist Smp#: 13

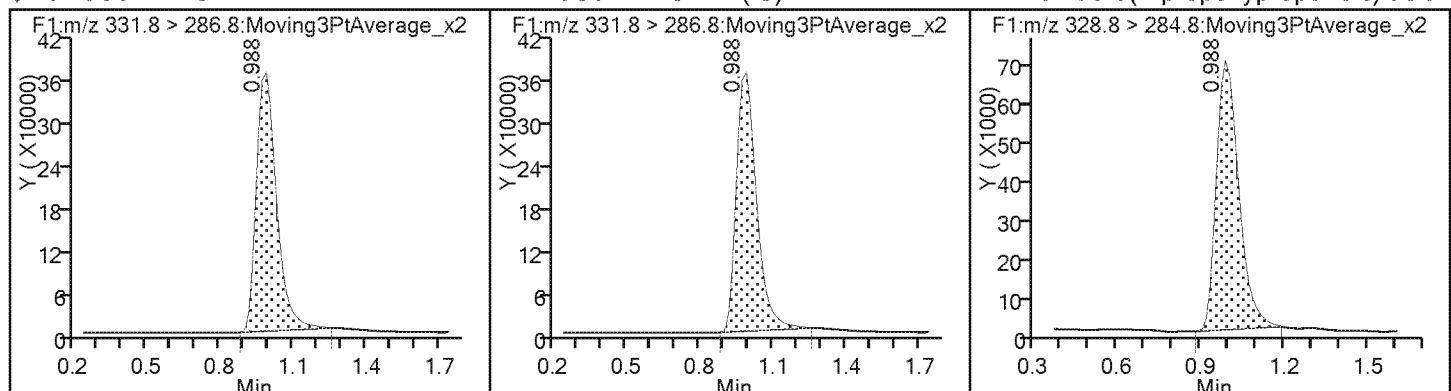
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: ICV 280-390728/13

Calibration Date: 10/10/2017 10:07

Instrument ID: LC_LCMS7

Calib Start Date: 10/10/2017 09:35

GC Column: Synergi Hydro ID:

Calib End Date: 10/10/2017 09:58

Lab File ID: hfpo717J10036.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.154		2.07	2.00	3.3	20.0
13C3 HFPO-DA	Ave	73145	72923		9.97	10.0	-0.3	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10036.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 10-Oct-2017 10:07:48 ALS Bottle#: 10 Worklist Smp#: 13
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist:
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:51:53 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:51:34

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA

331.8 > 286.8 0.880 0.880 0.0 1.000 729225 9.97 396

* 2 13C3 HFPO-DA (IS)

331.8 > 286.8 0.880 0.880 0.0 729225 10.0 396

1 Perfluoro(2-propoxypropanoic) acid

328.8 > 284.8 0.893 0.885 0.008 1.000 168368 2.07 111

Reagents:

HFPO_ICV_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20171010-63483.b\\hfp0717J10036.d

Injection Date: 10-Oct-2017 10:07:48 Instrument ID: LC_LCMS7

Lims ID: ICV

Client ID:

Operator ID: JBH

ALS Bottle#: 10 Worklist Smp#: 13

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

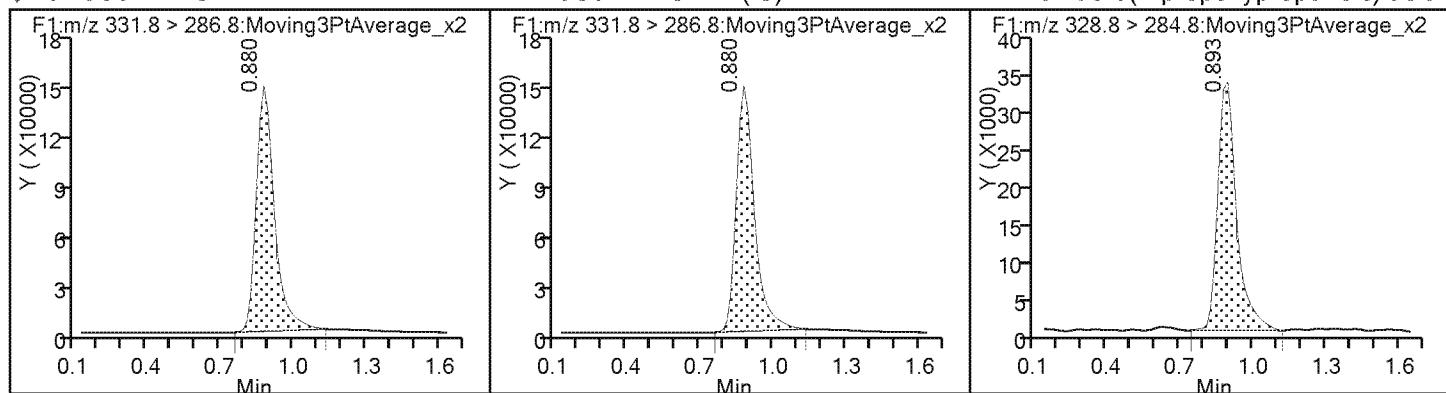
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: CCV 280-390728/24

Calibration Date: 10/10/2017 10:43

Instrument ID: LC_LCMS7

Calib Start Date: 10/10/2017 09:35

GC Column: Synergi Hydro ID:

Calib End Date: 10/10/2017 09:58

Lab File ID: hfpo717J10047.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.012		9.78	10.0	-2.2	20.0
13C3 HFPO-DA	Ave	73145	68787		9.40	10.0	-6.0	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10047.d
 Lims ID: CCV L6
 Client ID:
 Sample Type: CCV
 Inject. Date: 10-Oct-2017 10:43:29 ALS Bottle#: 7 Worklist Smp#: 24
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:52:02 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:52:05

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
331.8 > 286.8 0.839 0.880 -0.041 1.000 687867 9.40 327

* 2 13C3 HFPO-DA (IS)
331.8 > 286.8 0.839 0.880 -0.041 1.000 687867 10.0 327

1 Perfluoro(2-propoxypropanoic) acid
328.8 > 284.8 0.839 0.885 -0.046 1.000 696191 9.78 224

Reagents:

HFPO_CAL-6_00070 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20171010-63483.b\\hfp0717J10047.d

Injection Date: 10-Oct-2017 10:43:29 Instrument ID: LC_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH

ALS Bottle#: 7 Worklist Smp#: 24

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

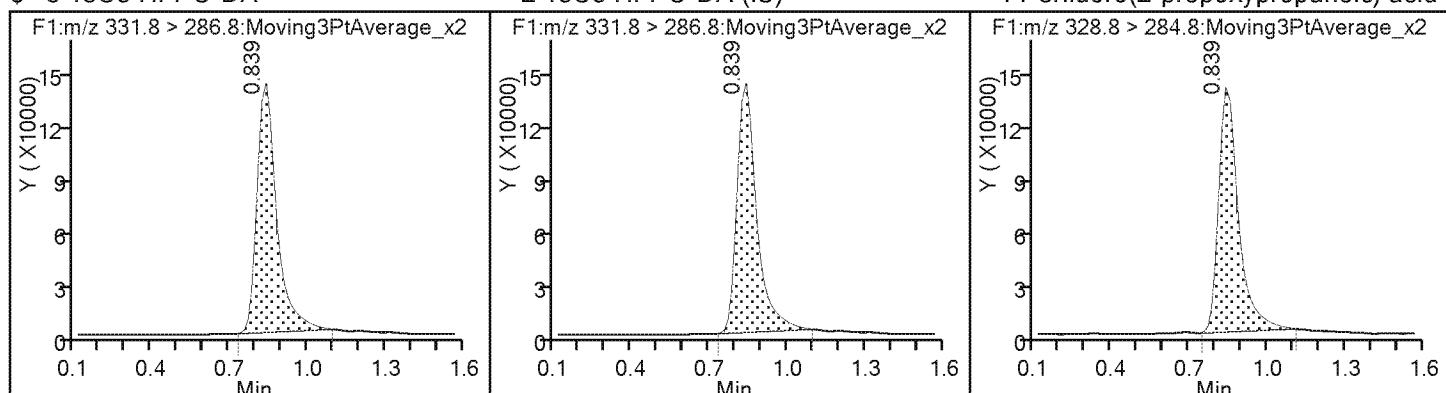
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: CCV 280-404182/3

Calibration Date: 02/07/2018 08:16

Instrument ID: LC_LCMS7

Calib Start Date: 10/10/2017 09:35

GC Column: Synergi Hydro ID:

Calib End Date: 10/10/2017 09:58

Lab File ID: hfpo718B07003.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		0.8772		8.45	10.0	-15.5	20.0
13C3 HFPO-DA	Ave	73145	75456		10.3	10.0	3.2	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07003.d
 Lims ID: CCV L6
 Client ID:
 Sample Type: CCV
 Inject. Date: 07-Feb-2018 08:16:43 ALS Bottle#: 7 Worklist Smp#: 3
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:22:56 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICAL File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:18:41

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.029 0.961 0.068 1.000 754557 10.3 1122
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.029 0.961 0.068 1.000 754557 10.0 1122
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 1.029 0.988 0.041 1.000 661874 8.45 128

Reagents:

HFPO_CAL-6_00079 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfp0718B07003.d

Injection Date: 07-Feb-2018 08:16:43 Instrument ID: LC_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH

ALS Bottle#: 7 Worklist Smp#: 3

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

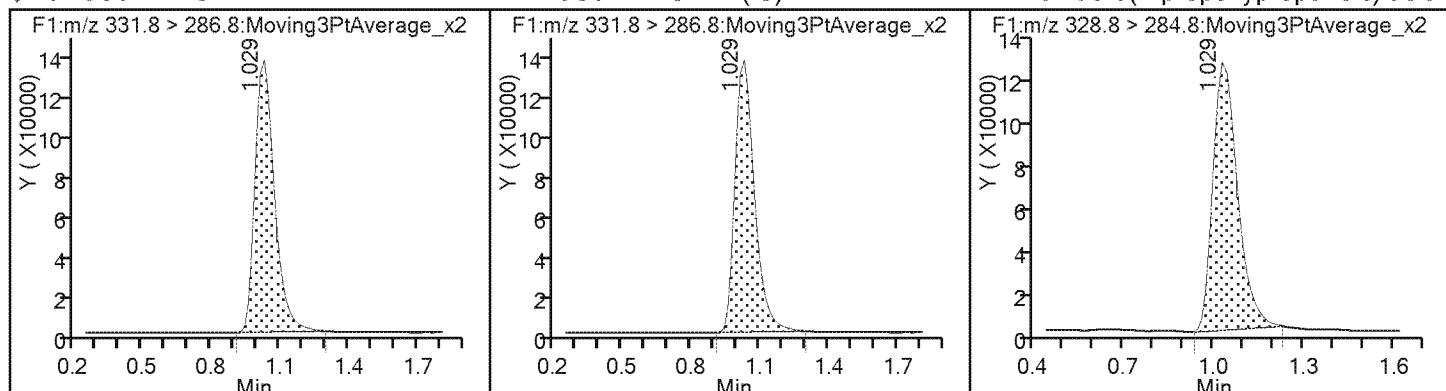
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-105950-1
SDG No.:
Lab Sample ID: CCV 280-404182/14 Calibration Date: 02/07/2018 08:52
Instrument ID: LC_LCMS7 Calib Start Date: 10/10/2017 09:35
GC Column: Synergi Hydro ID: Calib End Date: 10/10/2017 09:58
Lab File ID: hfpo718B07014.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.204		5.73	5.00	14.7	20.0
13C3 HFPO-DA	Ave	73145	95752		13.1	10.0	30.9	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07014.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 07-Feb-2018 08:52:26 ALS Bottle#: 6 Worklist Smp#: 14
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:03 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICAL File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:19:57

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 0.961 0.0 1.000 957518 13.1 1935
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 0.961 0.0 1.000 957518 10.0 1935
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.961 0.988 -0.027 1.000 576490 5.73 295

Reagents:

HFPO_CAL-5_00079 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07014.d

Injection Date: 07-Feb-2018 08:52:26

Instrument ID: LC_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH

ALS Bottle#: 6 Worklist Smp#: 14

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

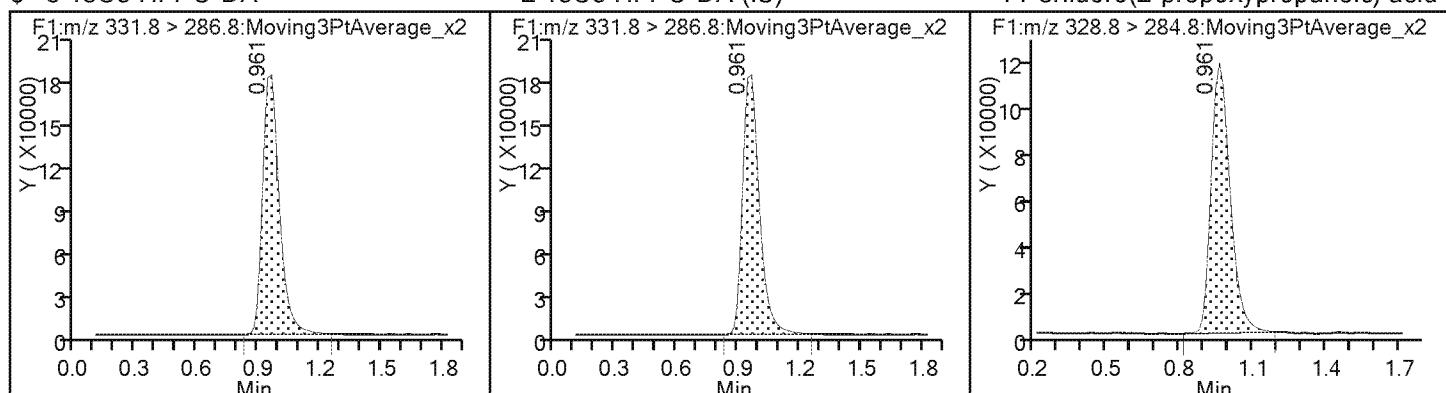
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: CCV 280-404182/25

Calibration Date: 02/07/2018 09:28

Instrument ID: LC_LCMS7

Calib Start Date: 10/10/2017 09:35

GC Column: Synergi Hydro ID:

Calib End Date: 10/10/2017 09:58

Lab File ID: hfpo718B07025.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		0.8921		8.60	10.0	-14.0	20.0
13C3 HFPO-DA	Ave	73145	99692		13.6	10.0	36.3	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07025.d
 Lims ID: CCV L6
 Client ID:
 Sample Type: CCV
 Inject. Date: 07-Feb-2018 09:28:15 ALS Bottle#: 7 Worklist Smp#: 25
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:09 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICAL File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:21:29

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.947 0.961 -0.014 1.000 996922 13.6 1938
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.947 0.961 -0.014 996922 10.0 1938
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.961 0.988 -0.027 1.000 889322 8.60 360

Reagents:

HFPO_CAL-6_00079 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfp0718B07025.d

Injection Date: 07-Feb-2018 09:28:15 Instrument ID: LC_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH

ALS Bottle#: 7 Worklist Smp#: 25

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

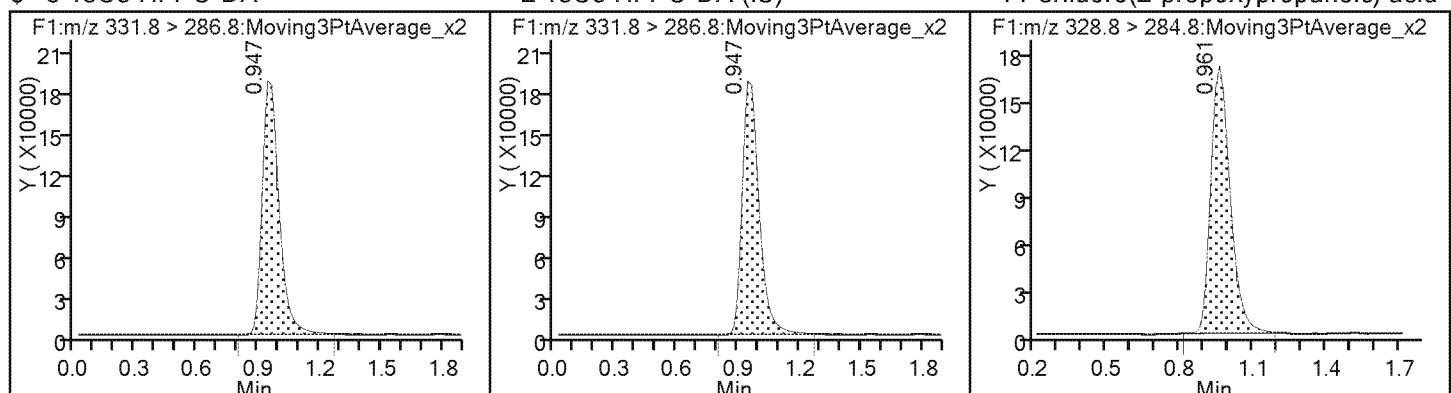
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: CCV 280-404182/32

Calibration Date: 02/07/2018 09:51

Instrument ID: LC_LCMS7

Calib Start Date: 10/10/2017 09:35

GC Column: Synergi Hydro ID:

Calib End Date: 10/10/2017 09:58

Lab File ID: hfpo718B07032.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.199		5.71	5.00	14.1	20.0
13C3 HFPO-DA	Ave	73145	99074		13.5	10.0	35.4	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07032.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 07-Feb-2018 09:51:03 ALS Bottle#: 6 Worklist Smp#: 32
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:23:13 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICAL File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:22:25

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.947 0.961 -0.014 1.000 990742 13.5 1550
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.947 0.961 -0.014 1.000 990742 10.0 1550
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.961 0.988 -0.027 1.000 593907 5.71 232

Reagents:

HFPO_CAL-5_00079 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfp0718B07032.d

Injection Date: 07-Feb-2018 09:51:03 Instrument ID: LC_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH

ALS Bottle#: 6 Worklist Smp#: 32

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

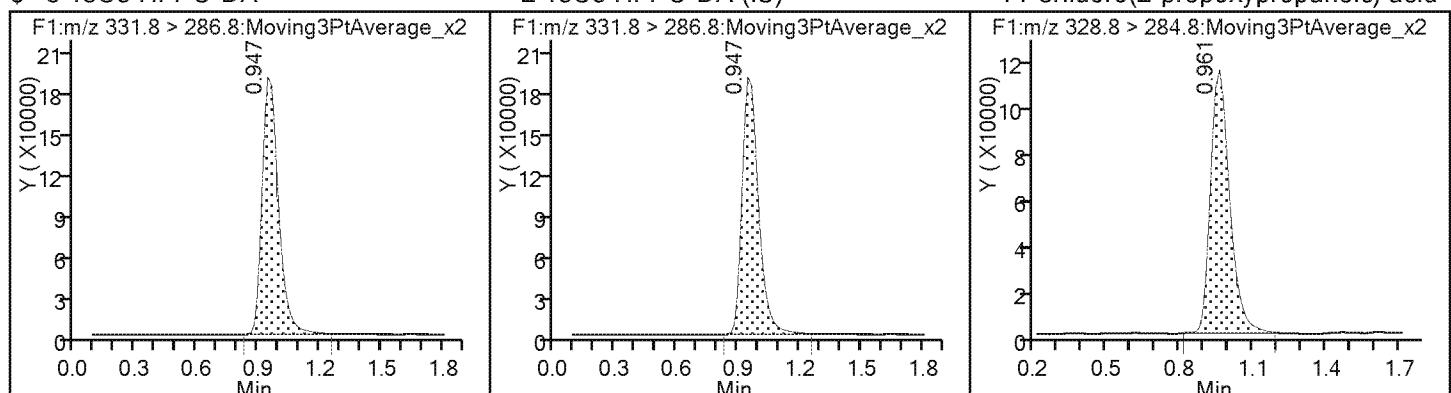
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: ICV 280-404345/14

Calibration Date: 02/08/2018 13:41

Instrument ID: LC_LCMS7

Calib Start Date: 02/08/2018 13:05

GC Column: Synergi Hydro ID:

Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B08045.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.139		2.05	1.95	5.3	20.0
13C3 HFPO-DA	Ave	74660	76733		10.3	10.0	2.8	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08045.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 08-Feb-2018 13:41:16 ALS Bottle#: 11 Worklist Smp#: 14
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist:
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:35

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.056 1.045 0.011 1.000 767333 10.3 1367
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.056 1.045 0.011 1.000 767333 10.0 1367
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 1.056 1.056 0.0 1.000 170411 2.05 30.8

Reagents:

HFPO_ICV_00034 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08045.d

Injection Date: 08-Feb-2018 13:41:16

Instrument ID: LC_LCMS7

Lims ID: ICV

Client ID:

Operator ID: JBH

ALS Bottle#: 11 Worklist Smp#: 14

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

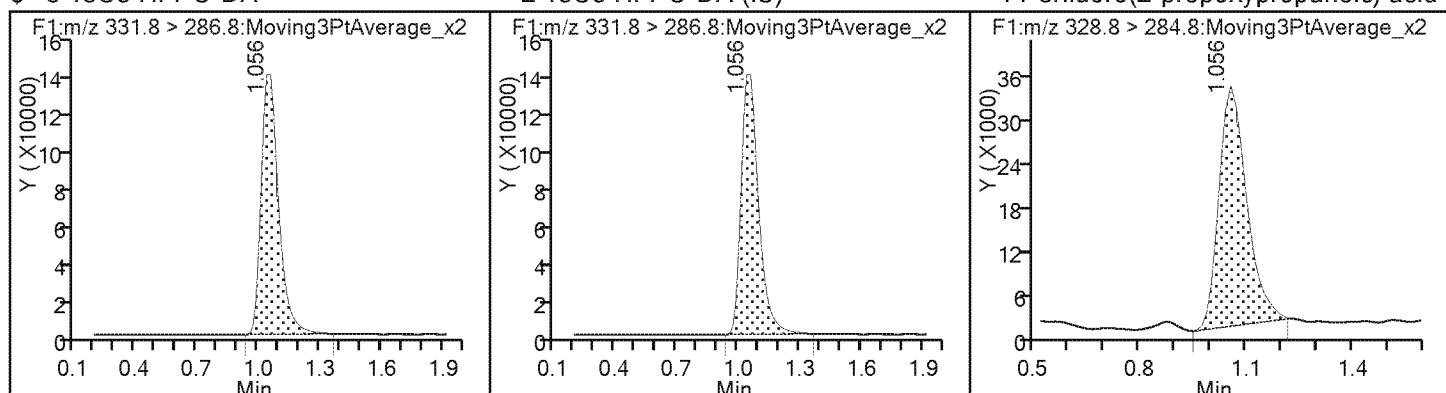
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: CCV 280-404346/25

Calibration Date: 02/08/2018 14:16

Instrument ID: LC_LCMS7

Calib Start Date: 02/08/2018 13:05

GC Column: Synergi Hydro ID:

Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B08056.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.113		5.20	5.00	4.0	20.0
13C3 HFPO-DA	Ave	74660	88948		11.9	10.0	19.1	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08056.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-Feb-2018 14:16:56 ALS Bottle#: 6 Worklist Smp#: 25
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:28

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.975 1.045 -0.070 1.000 889475 11.9 1245
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.975 1.045 -0.070 1.000 889475 10.0 1245
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 1.056 -0.081 1.000 495099 5.20 117

Reagents:

HFPO_CAL-5_00080 Amount Added: 1.00 Units: mL

Report Date: 08-Feb-2018 15:24:25

Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08056.d

Injection Date: 08-Feb-2018 14:16:56

Instrument ID: LC_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH

ALS Bottle#: 6 Worklist Smp#: 25

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

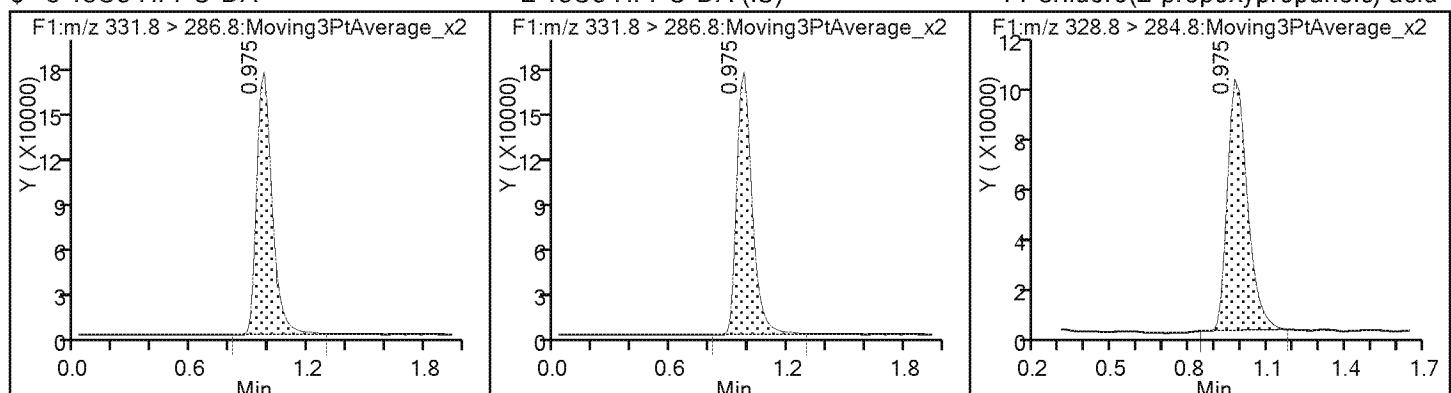
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: CCV 280-404346/36

Calibration Date: 02/08/2018 14:52

Instrument ID: LC_LCMS7

Calib Start Date: 02/08/2018 13:05

GC Column: Synergi Hydro ID:

Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B08067.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.146		10.7	10.0	7.4	20.0
13C3 HFPO-DA	Ave	74660	89621		12.0	10.0	20.0	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08067.d
 Lims ID: CCV L6
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-Feb-2018 14:52:46 ALS Bottle#: 7 Worklist Smp#: 36
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:30 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:51

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.975 1.045 -0.070 1.000 896208 12.0 1304
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.975 1.045 -0.070 1.000 896208 10.0 1304
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 1.056 -0.081 1.000 1027182 10.7 221

Reagents:

HFPO_CAL-6_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08067.d

Injection Date: 08-Feb-2018 14:52:46 Instrument ID: LC_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH

ALS Bottle#: 7 Worklist Smp#: 36

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

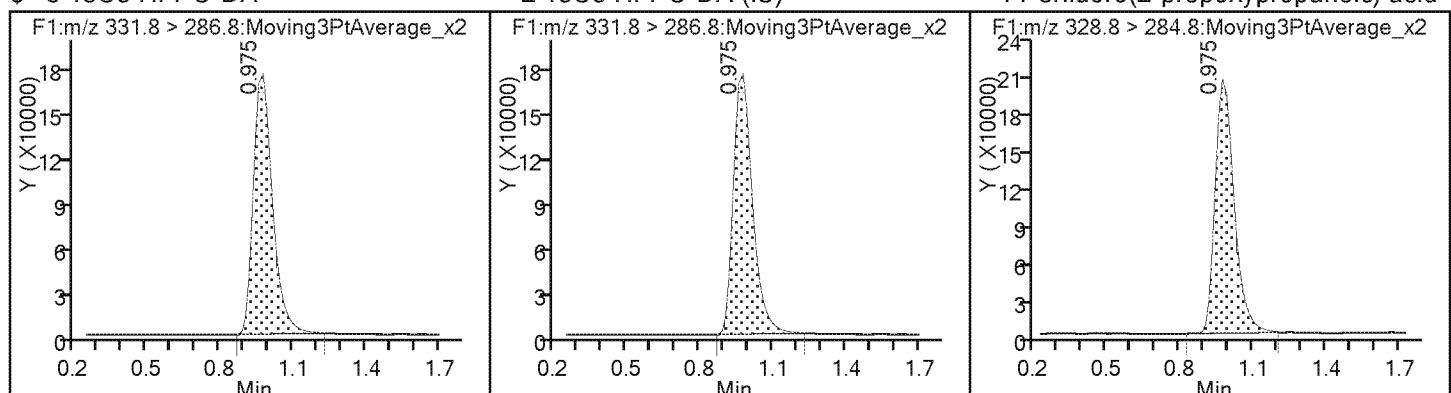
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: CCV 280-404346/43

Calibration Date: 02/08/2018 15:15

Instrument ID: LC_LCMS7

Calib Start Date: 02/08/2018 13:05

GC Column: Synergi Hydro ID:

Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B08074.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.198		5.60	5.00	11.9	20.0
13C3 HFPO-DA	Ave	74660	88643		11.9	10.0	18.7	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08074.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-Feb-2018 15:15:34 ALS Bottle#: 6 Worklist Smp#: 43
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:40 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:23:13

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 886432 11.9 1244
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 886432 10.0 1244
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 1.056 -0.081 1.000 531016 5.60 98.4

Reagents:

HFPO_CAL-5_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08074.d

Injection Date: 08-Feb-2018 15:15:34

Instrument ID: LC_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH

ALS Bottle#: 6 Worklist Smp#: 43

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

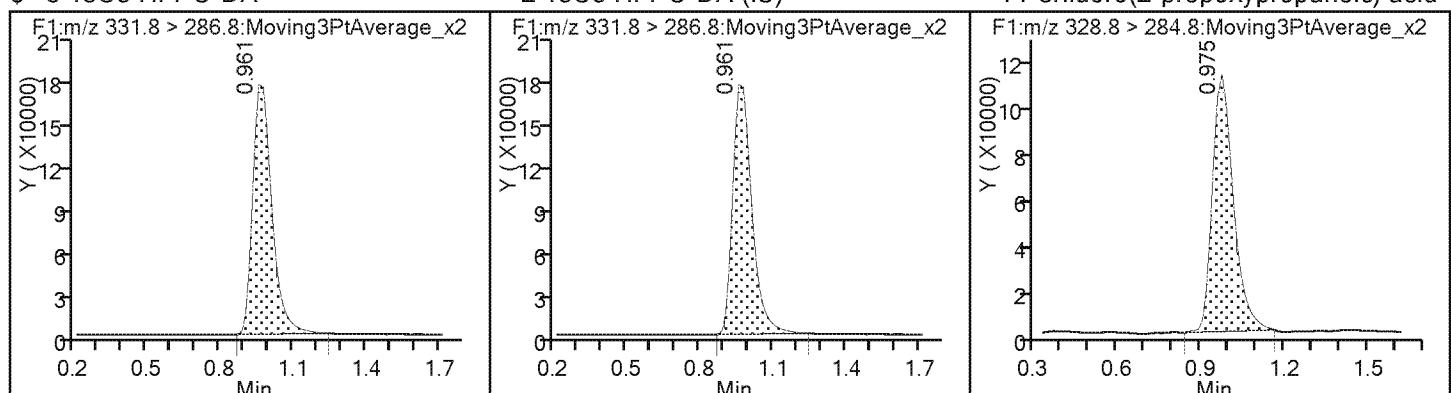
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: CCV 280-404457/3

Calibration Date: 02/09/2018 09:18

Instrument ID: LC_LCMS7

Calib Start Date: 02/08/2018 13:05

GC Column: Synergi Hydro ID:

Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B09013.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.091		10.2	10.0	2.2	20.0
13C3 HFPO-DA	Ave	74660	65790		8.81	10.0	-11.9	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09013.d
 Lims ID: CCV L6
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-Feb-2018 09:18:20 ALS Bottle#: 7 Worklist Smp#: 3
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:01:57 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:00

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.015 1.045 -0.030 1.000 657904 8.81 1213
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.015 1.045 -0.030 1.000 657904 10.0 1213
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 1.029 1.056 -0.027 1.000 717723 10.2 121

Reagents:

HFPO_CAL-6_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfp0718B09013.d

Injection Date: 09-Feb-2018 09:18:20 Instrument ID: LC_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH

ALS Bottle#: 7 Worklist Smp#: 3

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

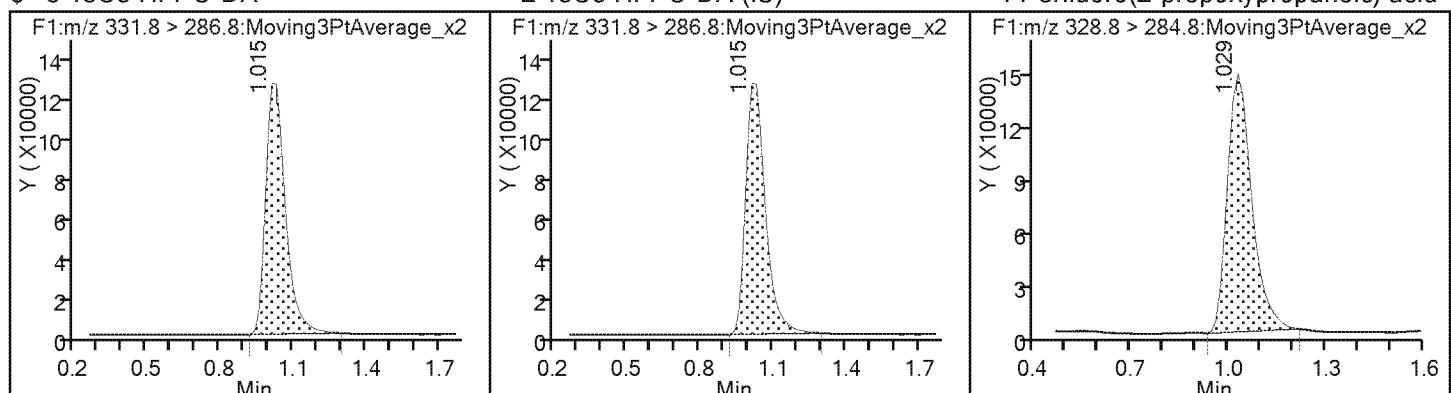
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: CCV 280-404457/14

Calibration Date: 02/09/2018 09:54

Instrument ID: LC_LCMS7

Calib Start Date: 02/08/2018 13:05

GC Column: Synergi Hydro ID:

Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B09024.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.165		5.44	5.00	8.8	20.0
13C3 HFPO-DA	Ave	74660	84022		11.3	10.0	12.5	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09024.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-Feb-2018 09:54:03 ALS Bottle#: 6 Worklist Smp#: 14
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:11 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:32

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 840222 11.3 1666
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 840222 10.0 1666
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 1.056 -0.081 1.000 489443 5.44 108

Reagents:

HFPO_CAL-5_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfp0718B09024.d

Injection Date: 09-Feb-2018 09:54:03 Instrument ID: LC_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH

ALS Bottle#: 6 Worklist Smp#: 14

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

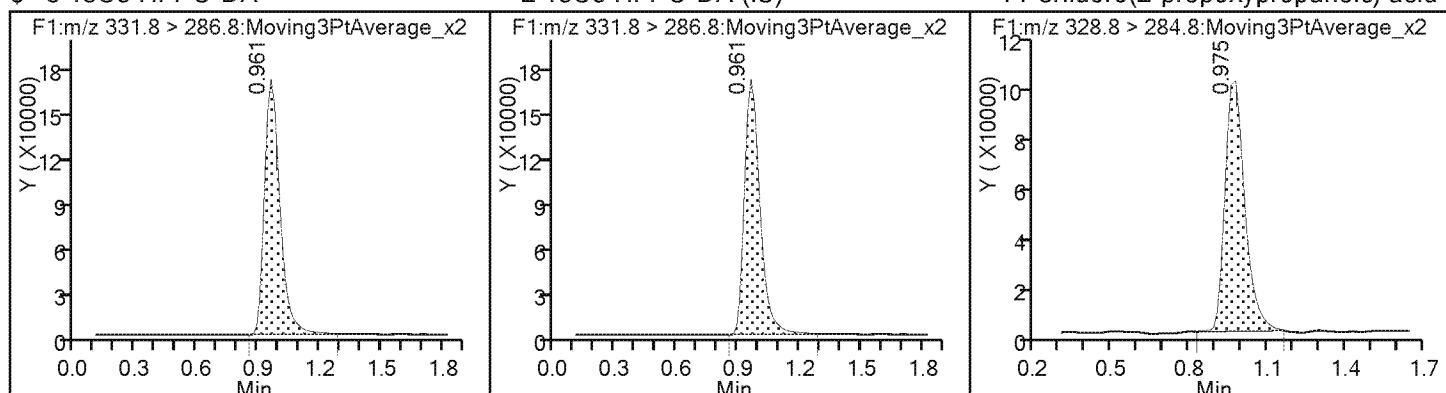
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: CCV 280-404457/25

Calibration Date: 02/09/2018 10:29

Instrument ID: LC_LCMS7

Calib Start Date: 02/08/2018 13:05

GC Column: Synergi Hydro ID:

Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B09035.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.118		10.5	10.0	4.7	20.0
13C3 HFPO-DA	Ave	74660	86591		11.6	10.0	16.0	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09035.d
 Lims ID: CCV L6
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-Feb-2018 10:29:50 ALS Bottle#: 7 Worklist Smp#: 25
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L6
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:23

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 865912 11.6 1708
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 865912 10.0 1708
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.961 1.056 -0.095 1.000 967900 10.5 209

Reagents:

HFPO_CAL-6_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfp0718B09035.d

Injection Date: 09-Feb-2018 10:29:50

Instrument ID: LC_LCMS7

Lims ID: CCV L6

Client ID:

Operator ID: JBH

ALS Bottle#: 7 Worklist Smp#: 25

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

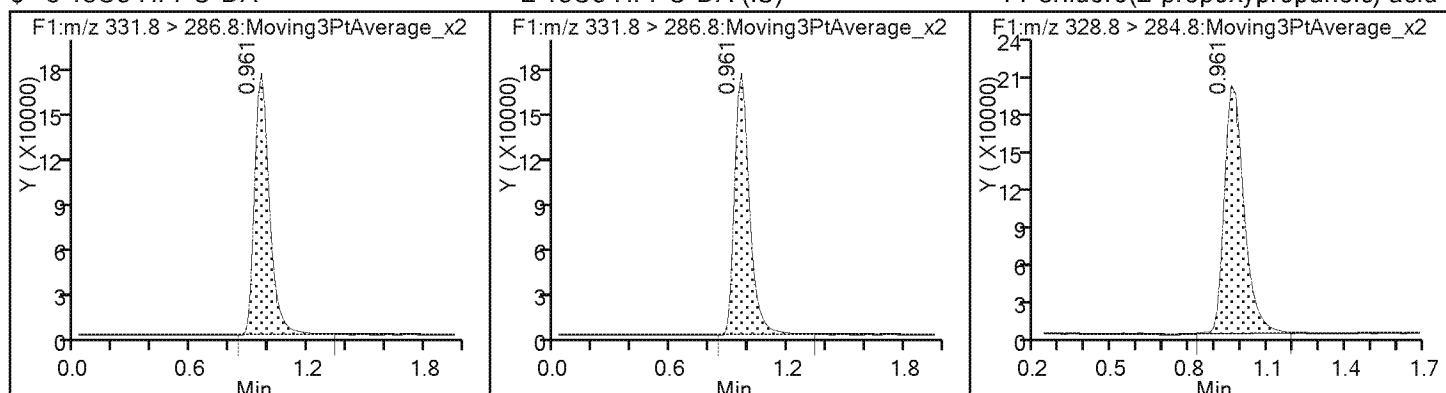
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Lab Sample ID: CCV 280-404457/32

Calibration Date: 02/09/2018 10:52

Instrument ID: LC_LCMS7

Calib Start Date: 02/08/2018 13:05

GC Column: Synergi Hydro ID:

Calib End Date: 02/08/2018 13:31

Lab File ID: hfpo718B09042.d

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HFPO-DA	Lin1		1.157		5.40	5.00	8.1	20.0
13C3 HFPO-DA	Ave	74660	87534		11.7	10.0	17.2	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09042.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-Feb-2018 10:52:39 ALS Bottle#: 6 Worklist Smp#: 32
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Sublist: chrom-HFPO*sub1

Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:34 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:47

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 875336 11.7 1467
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 875336 10.0 1467
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.961 1.056 -0.095 1.000 506290 5.40 107

Reagents:

HFPO_CAL-5_00080 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfp0718B09042.d

Injection Date: 09-Feb-2018 10:52:39

Instrument ID: LC_LCMS7

Lims ID: CCV L5

Client ID:

Operator ID: JBH

ALS Bottle#: 6 Worklist Smp#: 32

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

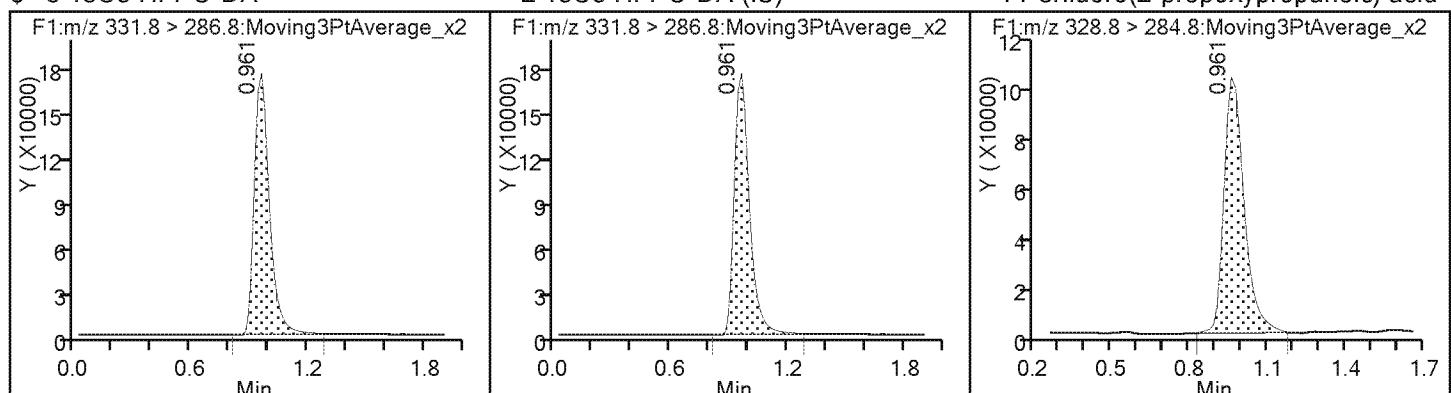
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

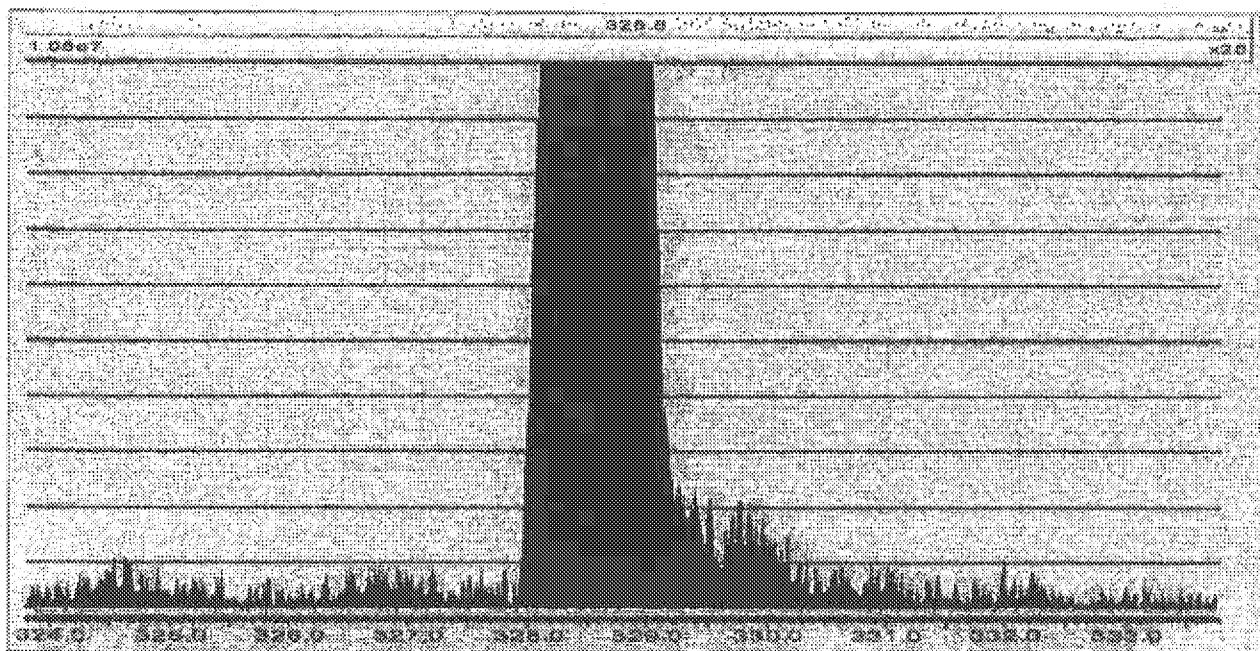
1 Perfluoro(2-propoxypropanoic) acid



File: C:\MassLynx\8321.PRO\ACQUISITIONPOMRM.lpr

Instrument: XEVO-TQMS\PVBA453

Printed: Wednesday, February 07, 2018 07:53:21 Mountain Standard Time



Type	Start Mass	End Mass	Set Mass
MS1 Scan	323.80	333.80	
Source (ES-)	Settings	Readbacks	
Capillary (kV)	0.50	0.54	
Cone (V)	10.00	-21.06	
Extractor (V)	3.00	-10.61	
Source Temperature (°C)	120	120	
Desolvation Temperature (°C)	200	200	
Cone Gas Flow (L/Hr)	50	50	
Desolvation Gas Flow (L/Hr)	800	791	
Collision Gas Flow (mL/Min)	0.15	0.04	
Analyser	Settings	Readbacks	
LM 1 Resolution	2.8		
HM 1 Resolution	14.8		
Ion Energy 1	0.7	Chimayorn	
MS Mode Collision Energy	7.00		
MSMS Mode Collision Energy	20.00	2/3/4g	
MS Mode Entrance	0.50		
MS Mode Exit	0.50		
Gas On MS Mode Entrance	0.50		
Gas On MS Mode Exit	0.50		
Gas On MSMS Mode Entrance	0.50		
Gas On MSMS Mode Exit	0.50		
Gas Off MS Mode Entrance	30.00		
Gas Off MS Mode Exit	30.00		
Gas Off MSMS Mode Entrance	2.00		
Gas Off MSMS Mode Exit	2.00		
ScanWave MS Mode Entrance	0.50		
ScanWave MS Mode Exit	0.50		
ScanWave MSMS Mode Entrance	0.50		
ScanWave MSMS Mode Exit	0.50		
LM 2 Resolution	2.9		
HM 2 Resolution	14.7		
Ion Energy 2	0.3		

File: C:\MassLynx\8321.PROVACQUDBHFPOMRM.lpr

Instrument: XEVO-TQMS\VBAA453

Printed: Wednesday, February 07, 2018 07:53:21 Mountain Standard Time

Multiplier 524.05
Active Reservoir A

Pressure Gauges

Collision Cell Pressure (mbar) 7.878782e-005

Instrument Configuration**Automatic Mode**

MS Inter-scan delay (secs)	0.006
Polarity/Mode switch Inter-scan delay (secs)	0.020
Enhanced Inter-scan delay (secs)	0.020

Inter-channel delay - See Tables**MS 1 Delay Table:**

R	delay
<= 0.500	0.005
<= 2.000	0.008
<= 4.000	0.010
<= 11.000	0.012
> 11.000	0.014

Chromform

z/g Ing

MS 2 Delay Table:

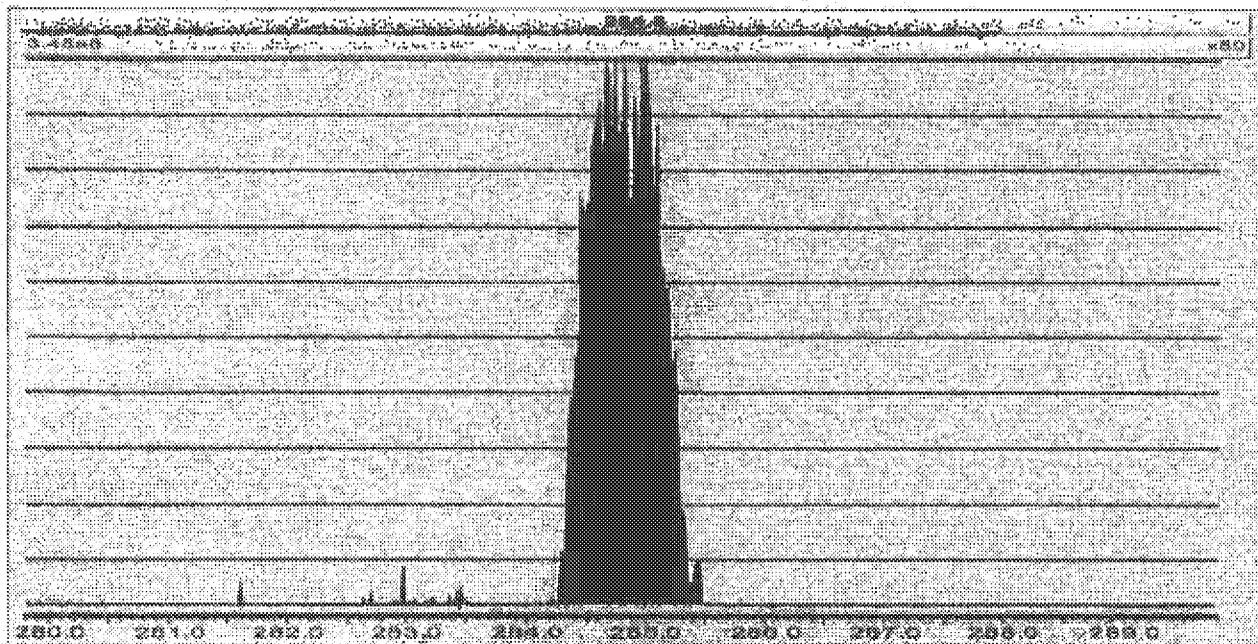
R	delay
<= 8.000	0.005
<= 25.000	0.006
> 28.000	0.007

z/g Ing

File: C:\MassLynx\8321.PRO\ACQUDB\HFPO.MRM.lpr

Instrument: XEVO-TQMS\VB463

Printed: Wednesday, February 07, 2018 07:53:59 Mountain Standard Time



Type	Start Mass	End Mass	Set Mass
Daughter Scan	279.80	289.80	328.80

Source (ES-)	Settings	Readbacks
Capillary (kV)	0.50	0.54
Cone (V)	10.00	-21.06
Extractor (V)	3.00	-10.61
Source Temperature (°C)	120	120
Desolvation Temperature (°C)	200	200
Cone Gas Flow (L/Hr)	50	50
Desolvation Gas Flow (L/Hr)	800	791
Collision Gas Flow (mL/Min)	0.15	0.14

Analyser	Settings	Readbacks
LM 1 Resolution	2.8	
HM 1 Resolution	14.8	
Ion Energy 1	0.7	0.70000
MS Mode Collision Energy	7.00	
MSMS Mode Collision Energy	20.00	24.8/48
MS Mode Entrance	0.50	
MS Mode Exit	0.60	
Gas On MS Mode Entrance	0.60	
Gas On MS Mode Exit	0.60	
Gas On MSMS Mode Entrance	0.60	
Gas On MSMS Mode Exit	0.60	
Gas Off MS Mode Entrance	30.00	
Gas Off MS Mode Exit	30.00	
Gas Off MSMS Mode Entrance	2.00	
Gas Off MSMS Mode Exit	2.00	
ScanWave MS Mode Entrance	0.80	
ScanWave MS Mode Exit	0.60	
ScanWave MSMS Mode Entrance	0.60	
ScanWave MSMS Mode Exit	0.60	
LM 2 Resolution	2.9	
HM 2 Resolution	14.7	
Ion Energy 2	0.3	

File: C:\MassLynx\8321.PROVACQUDBHFPOMRM.lpr

Instrument: XEVO-TQMS\VB453

Printed: Wednesday, February 07, 2018 07:53:59 Mountain Standard Time

Multiplier 523.81
Active Reservoir A

Pressure Gauges

Collision Cell Pressure (mbar) 1.190426e-003

Instrument Configuration**Automatic Mode**

MS Inter-scan delay (secs) 0.005
Polarity/Mode switch Inter-scan delay (secs) 0.020
Enhanced Inter-scan delay (secs) 0.020

Inter-channel delay - See Tables**MS 1 Delay Table:**

R delay
<= 0.500 0.005
<= 2.000 0.008
<= 4.000 0.010
<= 11.000 0.012
> 11.000 0.014

2/8/18

MS 2 Delay Table:

R delay
<= 8.000 0.005
<= 25.000 0.006
> 25.000 0.007

File: c:\masslynx\8321.prolacquedb\fp0.exp

Printed: Wednesday, February 07, 2018 10:12:00 Mountain Standard Time

Creation Time	Fri 18 Nov 2016 09:08:40
Instrument Identifier	XEVO-TQMSIVBA453
Version Number	1.0
Duration (min)	2.0
Calibration Filename	C:\MassLynx\IntellStartResults\Unit Mass Resolution\Calibration_20100811.2.cal
Solvent Delay Divert Valve Enabled	0
Number Of Functions	1

Function 1 : MRM of 2 mass pairs, Time 0.00 to 2.00, ES-

Type	MRM
Ion Mode	ES-
Inter Channel Delay (sec)	-1.000
InterScan Time (sec)	-1.000
Span (Da)	0.5
Start Time (min)	0.0
End Time (min)	2.0

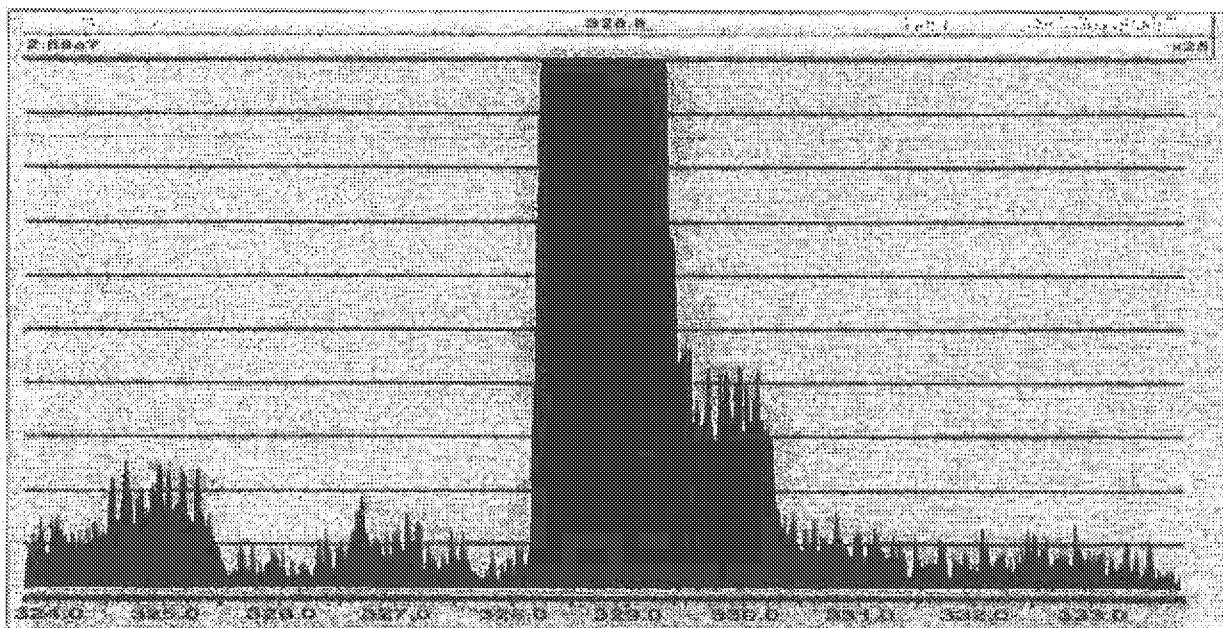
Ch	Prmt(Da)	Dau(Da)	Dwell(s)	Cone(V)	Coll(eV)	Delay(s)	Compound
1	328.80	284.80	0.400	10.00	7.00	-1.000	HRPO
2	331.80	286.80	0.400	10.00	7.00	-1.000	HRPO is

Ch1
2/3mg

File: C:\MassLynx\8321.PRO\ACQUDB\ExplosivesMRM.lpr

Instrument: XEVO-TQMS\VA453

Printed: Thursday, February 08, 2018 10:16:05 Mountain Standard Time



Type	Start Mass	End Mass	Set Mass
MS1 Scan	323.60	333.60	

Source (ES-)	Settings	Readbacks
Capillary (kV)	2.50	2.51
Cone (V)	10.00	-17.89
Extractor (V)	3.00	-7.78
Source Temperature (°C)	120	120
Desolvation Temperature (°C)	200	200
Cone Gas Flow (L/Hr)	30	29
Desolvation Gas Flow (L/Hr)	800	798
Collision Gas Flow (mL/Min)	0.15	0.04

Analyser	Settings	Readbacks
LM 1 Resolution	2.8	
HM 1 Resolution	14.8.	<i>Chloroform</i>
Ion Energy 1	0.7	
MS Mode Collision Energy	4.00	<i>2.00</i>
MSMS Mode Collision Energy	20.00	
MS Mode Entrance	0.60	
MS Mode Exit	0.60	
Gas On MS Mode Entrance	0.50	
Gas On MS Mode Exit	0.50	
Gas On MSMS Mode Entrance	0.50	
Gas On MSMS Mode Exit	0.50	
Gas Off MS Mode Entrance	30.00	
Gas Off MS Mode Exit	30.00	
Gas Off MSMS Mode Entrance	2.00	
Gas Off MSMS Mode Exit	2.00	
ScanWave MS Mode Entrance	0.50	
ScanWave MS Mode Exit	0.50	
ScanWave MSMS Mode Entrance	0.50	
ScanWave MSMS Mode Exit	0.50	
LM 2 Resolution	2.9	
HM 2 Resolution	14.7	
Ion Energy 2	0.3	

File: C:\MassLynx\8321.PRO\VACQUDB\ExplosivesMRM.lpr

Instrument: XEVO-TQMS\IVBA453

Printed: Thursday, February 08, 2018 10:16:05 Mountain Standard Time

Multiplier 623.57
Active Reservoir A

Pressure Gauges

Collision Cell Pressure (mbar) 7.830201e-005

Instrument Configuration**Automatic Mode**

MS Inter-scan delay (secs)	0.005
Polarity/Mode switch Inter-scan delay (secs)	0.020
Enhanced Inter-scan delay (secs)	0.020

Inter-channel delay - See Tables

MS 1 Delay Table:

R	delay
<= 0.500	0.005
<= 2.000	0.008
<= 4.000	0.010
<= 11.000	0.012
> 11.000	0.014

Chrom 1
2/1/18

MS 2 Delay Table:

R	delay
<= 8.000	0.005
<= 25.000	0.005
> 25.000	0.007

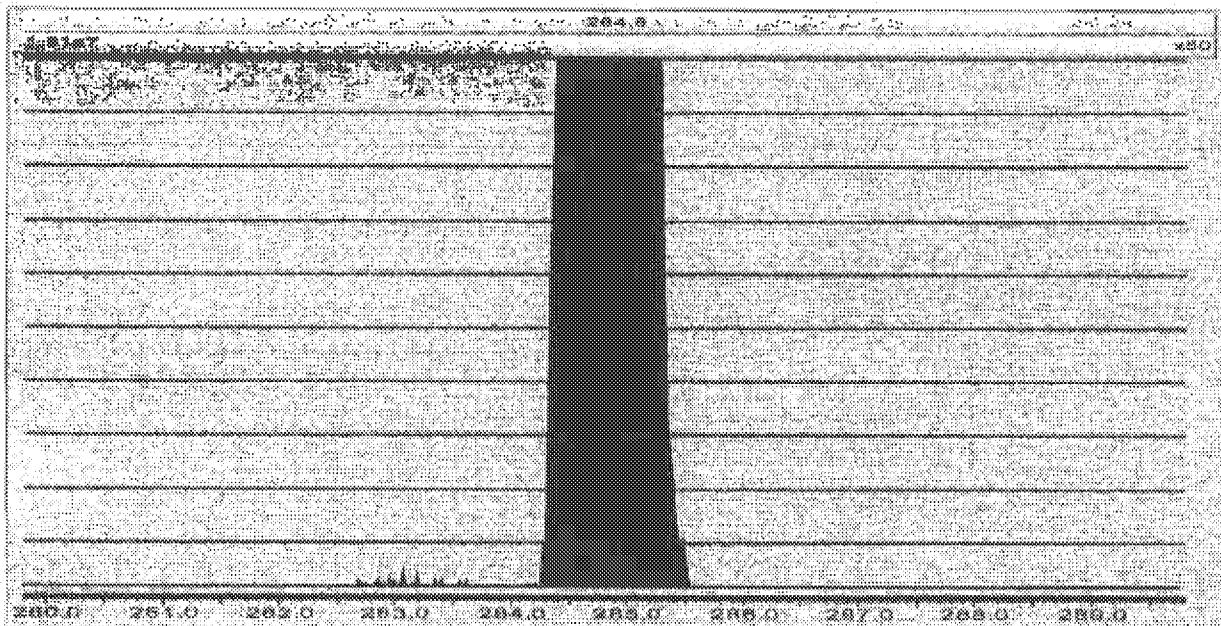
Waters Xevo TQ MS Detector Tune Parameters - MassLynx 4.1 SCN 843

Page 1 of 2

File: C:\MassLynx\8321.PRO\ACQUDB\ExplosivesMRM.lpr

Instrument: XEVO-TQMS\IVBA463

Printed: Thursday, February 08, 2018 10:16:49 Mountain Standard Time



Type	Start Mass	End Mass	Set Mass
Daughter Scan	279.80	280.80	326.80
Source (ES-)	Settings	Readbacks	
Capillary (kV)	2.60	2.62	
Cone (V)	10.00	-17.89	
Extractor (V)	3.00	-7.78	
Source Temperature (°C)	120	120	
Desolvation Temperature (°C)	200	200	
Cone Gas Flow (L/Hr)	30	30	
Desolvation Gas Flow (L/Hr)	800	793	
Collision Gas Flow (mL/Min)	0.16	0.14	
Analyser	Settings	Readbacks	
LM 1 Resolution	2.8		
HM 1 Resolution	14.8		
Ion Energy 1	0.7		
MS Mode Collision Energy	4.00		
MSMS Mode Collision Energy	20.00		
MS Mode Entrance	0.50		
MS Mode Exit	0.50		
Gas On MS Mode Entrance	0.50		
Gas On MS Mode Exit	0.50		
Gas On MSMS Mode Entrance	0.50		
Gas On MSMS Mode Exit	0.50		
Gas Off MS Mode Entrance	30.00		
Gas Off MS Mode Exit	30.00		
Gas Off MSMS Mode Entrance	2.00		
Gas Off MSMS Mode Exit	2.00		
ScanWave MS Mode Entrance	0.50		
ScanWave MS Mode Exit	0.50		
ScanWave MSMS Mode Entrance	0.50		
ScanWave MSMS Mode Exit	0.50		
LM 2 Resolution	2.9		
HM 2 Resolution	14.7		
Ion Energy 2	0.3		

File: C:\MassLynx\6321.PRO\ACQUDB\ExplosivesMRM.lpr

Instrument: XEVO-TQMS\IVBA453

Printed: Thursday, February 08, 2018 10:16:49 Mountain Standard Time

Multiplier 623.57
Active Reservoir A

Pressure Gauges
Collision Cell Pressure (mbar) 1.220245e-003

Instrument Configuration**Automatic Mode**

MS Inter-scan delay (secs) 0.005
Polarity/Mode switch Inter-scan delay (secs) 0.020
Enhanced Inter-scan delay (secs) 0.020
Inter-channel delay - See Tables

MS 1 Delay Table:

R delay	
<= 0.500	0.005
<= 2.000	0.008
<= 4.000	0.010
<= 11.000	0.012
> 11.000	0.014

Chloroform
2/7/18

MS 2 Delay Table:

R delay	
<= 8.000	0.005
<= 25.000	0.005
> 25.000	0.007

File: c:\masslynx\3321.pro\acquidb\hrpo.exp

Printed: Thursday, February 08, 2018 15:19:39 Mountain Standard Time

Creation Time	Fri 18 Nov 2016 09:08:40
Instrument Identifier	XEVO-TQMSIVBA463
Version Number	1.0
Duration (min)	2.0
Calibration Filename	C:\MassLynx\IntellิStartResults\Unit Mass Resolution\Calibration_20100511

-2.cal
Solvent Delay Divert Valve Enabled 0
Number Of Functions 1

Function 1 : MRM of 2 mass pairs, Time 0.00 to 2.00, ES-

Type	MRM
Ion Mode	ES-
Inter Channel Delay (sec)	-1.000
InterScan Time (sec)	-1.000
Span (Da)	0.5
Start Time (min)	0.0
End Time (min)	2.0

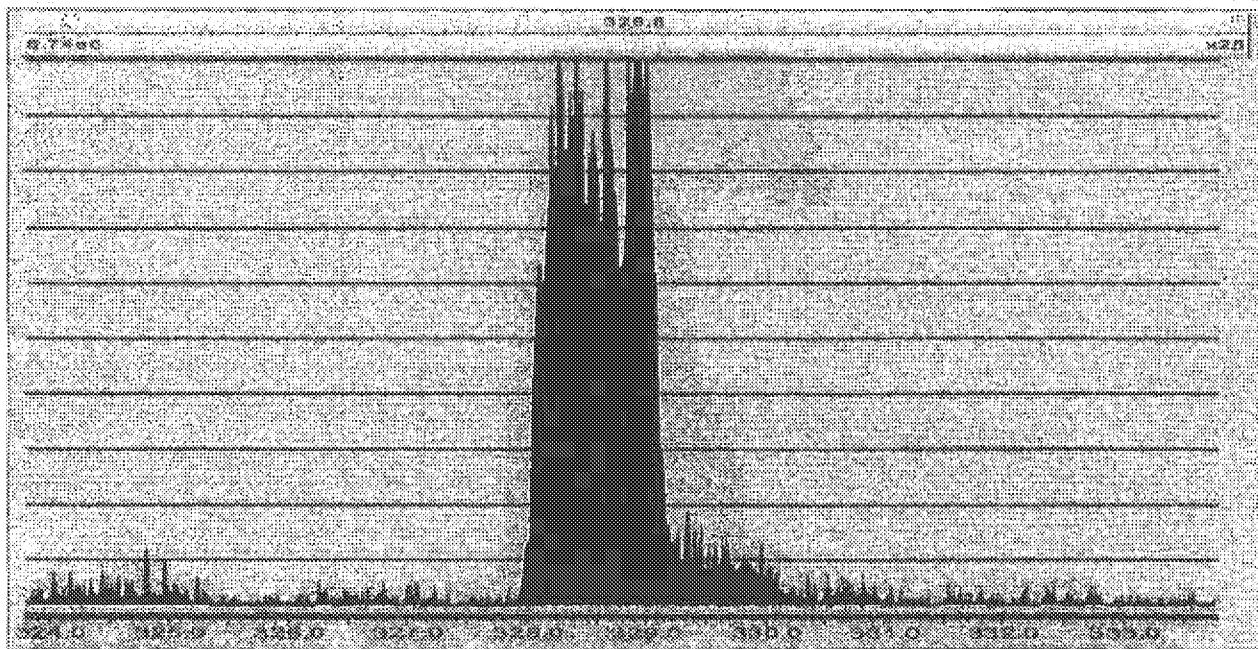
Ch	Prmt(Da)	Dau(Da)	Dwall(s)	Cone(V)	Coll(eV)	Delay(s)	Compound
1	326.80	284.80	0.400	10.00	7.00	-1.000	EFPO
2	331.80	286.80	0.400	10.00	7.00	-1.000	EFPO IS

John P. H.
2/8/18

File: C:\MassLynx\8321.PRO\ACQUADB\HFPO\RM.lpr

Instrument: XEVO-TQMS\PBA453

Printed: Friday, February 09, 2018 06:19:12 Mountain Standard Time



Type	Start Mass	End Mass	Set Mass
MS1 Scan	323.80	323.80	
Source (ES-)	Settings	Readbacks	
Capillary (kV)	0.50	0.64	
Cone (V)	10.00	-21.06	
Extractor (V)	3.00	-10.61	
Source Temperature (°C)	120	120	
Desolvation Temperature (°C)	200	200	
Cone Gas Flow (L/Hr)	50	50	
Desolvation Gas Flow (L/Hr)	800	782	
Collision Gas Flow (mL/Min)	0.15	0.04	
Analyser	Settings	Readbacks	
LM 1 Resolution	2.8		
HM 1 Resolution	14.8		
Ion Energy 1	0.7		
MS Mode Collision Energy	7.00		ChromPDI
MSMS Mode Collision Energy	20.00		
MS Mode Entrance	0.80		
MS Mode Exit	0.60		
Gas On MS Mode Entrance	0.50		
Gas On MS Mode Exit	0.50		
Gas On MSMS Mode Entrance	0.50		
Gas On MSMS Mode Exit	0.50		
Gas Off MS Mode Entrance	30.00		
Gas Off MS Mode Exit	30.00		
Gas Off MSMS Mode Entrance	2.00		
Gas Off MSMS Mode Exit	2.00		
ScanWave MS Mode Entrance	0.50		
ScanWave MS Mode Exit	0.60		
ScanWave MSMS Mode Entrance	0.50		
ScanWave MSMS Mode Exit	0.50		
LM 2 Resolution	2.9		
HM 2 Resolution	14.7		
Ion Energy 2	0.3		

File: C:\MassLynx\8321.PROVACQUDEHFPOMRM.lpr

Instrument: XEVO-TQMSIVBA453

Printed: Friday, February 09, 2018 08:18:12 Mountain Standard Time

Multiplier 524.05
Active Reservoir A

Pressure Gauges
Collision Cell Pressure (mbar) 7.878782e-005

Instrument Configuration**Automatic Mode**

MS Inter-scan delay (secs) 0.005
Polarity/Mode switch inter-scan delay (secs) 0.020
Enhanced Inter-scan delay (secs) 0.020

Inter-channel delay - See Tables**MS 1 Delay Table:**

R	delay	Ch 1/2/3/4/5/6/7/8
<= 0.500	0.005	Ch 1/2/3/4/5/6/7/8
<= 2.000	0.008	Ch 1/2/3/4/5/6/7/8
<= 4.000	0.010	Ch 1/2/3/4/5/6/7/8
<= 11.000	0.012	Ch 1/2/3/4/5/6/7/8
> 11.000	0.014	Ch 1/2/3/4/5/6/7/8

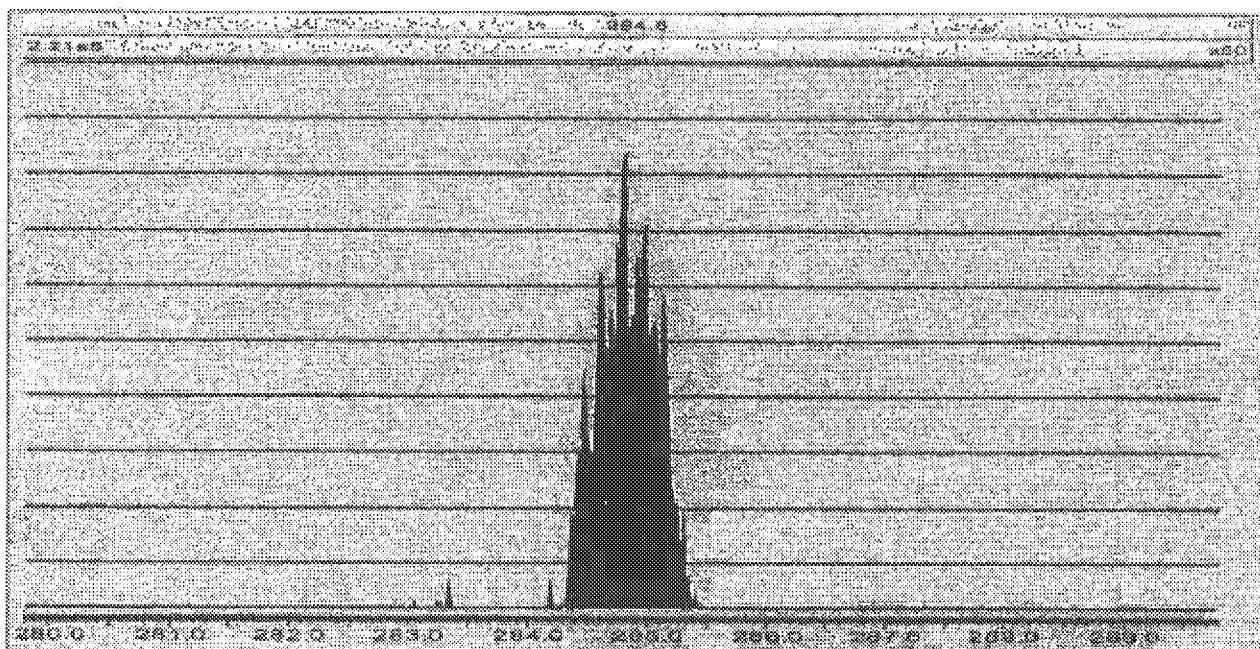
MS 2 Delay Table:

R	delay	Ch 1/2/3/4/5/6/7/8
<= 8.000	0.005	Ch 1/2/3/4/5/6/7/8
<= 25.000	0.008	Ch 1/2/3/4/5/6/7/8
> 25.000	0.007	Ch 1/2/3/4/5/6/7/8

File: C:\MassLynx\8321.PRO\ACQUDBHFPO.MRM.lpr

Instrument: XEVO-TQMS\IVBA453

Printed: Friday, February 09, 2018 08:20:18 Mountain Standard Time



Type	Start Mass	End Mass	Set Mass
Daughter Scan	279.80	289.80	328.80

Source (ESI)	Settings	Readbacks
Capillary (kV)	0.50	0.53
Cone (V)	10.00	-21.06
Extractor (V)	3.00	-10.61
Source Temperature (°C)	120	120
Desolvation Temperature (°C)	200	200
Cone Gas Flow (L/Hr)	60	49
Desolvation Gas Flow (L/Hr)	800	792
Collision Gas Flow (mL/Min)	0.16	0.14

Analyser	Settings	Readbacks
LM 1 Resolution	2.8	
HM 1 Resolution	14.8	
Ion Energy 1	0.7	0.60 (POM)
MS Mode Collision Energy	7.00	
MSMS Mode Collision Energy	20.00	21.2 (POM)
MS Mode Entrance	0.50	
MS Mode Exit	0.50	
Gas On MS Mode Entrance	0.50	
Gas On MS Mode Exit	0.50	
Gas On MSMS Mode Entrance	0.50	
Gas On MSMS Mode Exit	0.50	
Gas Off MS Mode Entrance	30.00	
Gas Off MS Mode Exit	30.00	
Gas Off MSMS Mode Entrance	2.00	
Gas Off MSMS Mode Exit	2.00	
ScanWave MS Mode Entrance	0.50	
ScanWave MS Mode Exit	0.50	
ScanWave MSMS Mode Entrance	0.50	
ScanWave MSMS Mode Exit	0.50	
LM 2 Resolution	2.9	
HM 2 Resolution	14.7	
Ion Energy 2	0.3	

File: C:\MassLynx\8321.PRO\ACQUDB\HFPOMRM.lpr

Instrument: XEVO-TQMS\IVBA453

Printed: Friday, February 09, 2018 06:20:18 Mountain Standard Time

Multiplier 624.06
Active Reservoir A

Pressure Gauges

Collision Cell Pressure (mbar) 1.227815e-003

Instrument Configuration**Automatic Mode**

MS Inter-scan delay (secs) 0.005
Polarity/Mode switch Inter-scan delay (secs) 0.020
Enhanced Inter-scan delay (secs) 0.020

Inter-channel delay - See Tables**MS 1 Delay Table:**

R delay
≤ 0.500 0.005
≤ 2.000 0.008
≤ 4.000 0.010
≤ 11.000 0.012
> 11.000 0.014

MS 2 Delay Table:

R delay
≤ 8.000 0.005
≤ 25.000 0.008
> 25.000 0.007

*Chad Pohl
2/12/18*

File: c:\masslynx\8321.protocol\hfpo.exp

Printed: Friday, February 09, 2018 11:40:34 Mountain Standard Time

Creation Time Fri 18 Nov 2016 08:08:40
Instrument Identifier XEVO-TQMS\VB4453
Version Number 1.0
Duration (min) 2.0
Calibration Filename C:\MassLynx\IntellStart\Results\Unit Mass Resolution\Calibration_20100811

.2.cal
Solvent Delay Divert Valve Enabled 0
Number Of Functions 1

Function 1 : MRM of 2 mass pairs, Time 0.00 to 2.00, ES-

Type MRM
Ion Mode ES-
Inter Channel Delay (sec) -1.000
InterScan Time (sec) -1.000
Span (Da) 0.5
Start Time (min) 0.0
End Time (min) 2.0

Ch	Prmt (Da)	Dau (Da)	Dwell (s)	Cone (V)	Coll (eV)	Delay (s)	Compound
1	328.80	284.80	0.400	10.00	7.00	-1.000	HFPO
2	331.80	286.80	0.400	10.00	7.00	-1.000	HFPO IS

09/02/18
2/9/18

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1
SDG No.:
Client Sample ID: Lab Sample ID: MB 280-403988/1-A
Matrix: Water Lab File ID: hfpo718B07004.d
Analysis Method: 8321A Date Collected:
Extraction Method: 3535 Date Extracted: 02/06/2018 09:31
Sample wt/vol: 250 (mL) Date Analyzed: 02/07/2018 08:19
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 20 (uL) GC Column: Synergi Hydro ID:
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	104		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07004.d
 Lims ID: MB 280-403988/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 07-Feb-2018 08:19:57 ALS Bottle#: 11 Worklist Smp#: 4
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: MB280-403988/1-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:22:56 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:18:45

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.015 0.961 0.054 1.000 759673 10.4 1539
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.015 0.961 0.054 759673 10.0 1539

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfp0718B07004.d

Injection Date: 07-Feb-2018 08:19:57

Instrument ID: LC_LCMS7

Lims ID: MB 280-403988/1-A

Client ID:

Operator ID: JBH

ALS Bottle#: 11 Worklist Smp#: 4

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

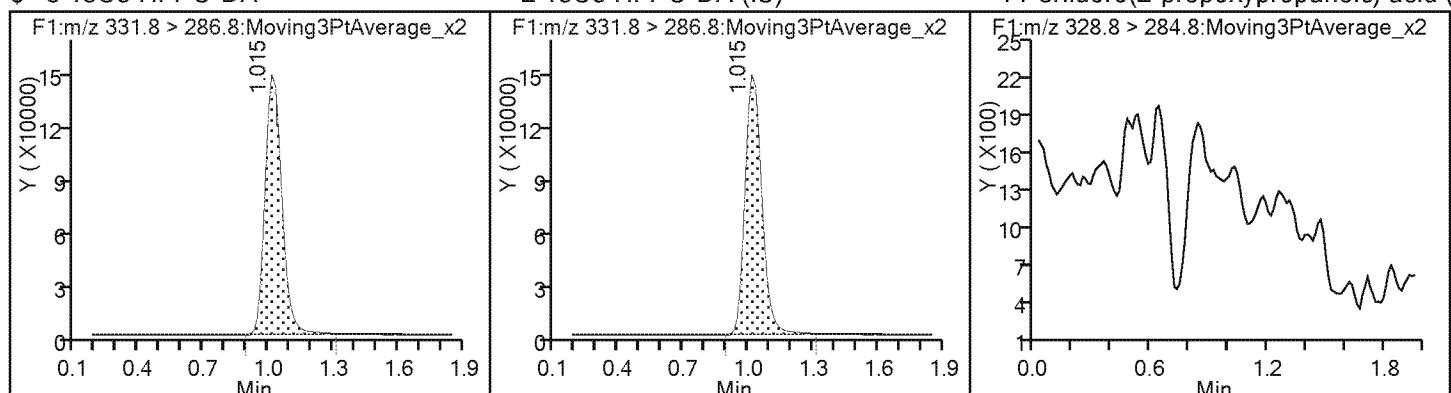
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (ND)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07004.d
 Lims ID: MB 280-403988/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 07-Feb-2018 08:19:57 ALS Bottle#: 11 Worklist Smp#: 4
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: MB280-403988/1-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:22:56 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:18:45

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.4	103.86

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1
SDG No.:
Client Sample ID: Lab Sample ID: MB 280-404157/1-A
Matrix: Water Lab File ID: hfpo718B08046.d
Analysis Method: 8321A Date Collected:
Extraction Method: 3535 Date Extracted: 02/07/2018 10:33
Sample wt/vol: 250 (mL) Date Analyzed: 02/08/2018 13:44
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 20 (uL) GC Column: Synergi Hydro ID:
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	112		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08046.d
 Lims ID: MB 280-404157/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 08-Feb-2018 13:44:29 ALS Bottle#: 12 Worklist Smp#: 15
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: MB280-404157/1-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:44

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 1.029 1.045 -0.016 1.000 833686 11.2 1494
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 1.029 1.045 -0.016 833686 10.0 1494

Report Date: 08-Feb-2018 15:24:20

Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08046.d

Injection Date: 08-Feb-2018 13:44:29

Instrument ID: LC_LCMS7

Lims ID: MB 280-404157/1-A

Client ID:

Operator ID: JBH

ALS Bottle#: 12 Worklist Smp#: 15

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

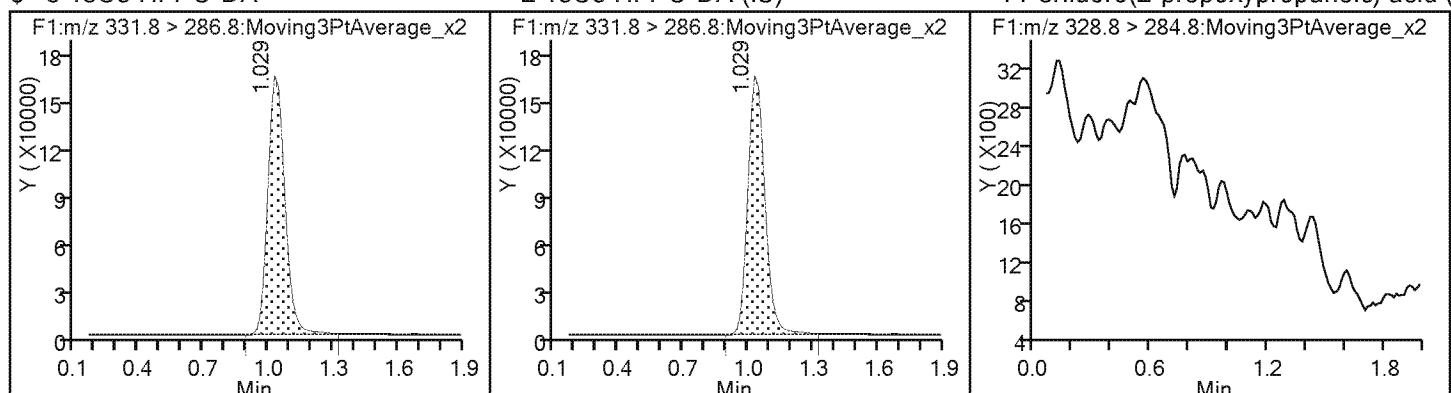
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (ND)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08046.d
 Lims ID: MB 280-404157/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 08-Feb-2018 13:44:29 ALS Bottle#: 12 Worklist Smp#: 15
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: MB280-404157/1-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:44

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.2	111.66

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1
SDG No.:
Client Sample ID: Lab Sample ID: MB 280-404355/1-A
Matrix: Water Lab File ID: hfpo718B09014.d
Analysis Method: 8321A Date Collected:
Extraction Method: 3535 Date Extracted: 02/08/2018 17:57
Sample wt/vol: 250 (mL) Date Analyzed: 02/09/2018 09:21
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 20 (uL) GC Column: Synergi Hydro ID:
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.010		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	96		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09014.d
 Lims ID: MB 280-404355/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 09-Feb-2018 09:21:34 ALS Bottle#: 12 Worklist Smp#: 4
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: MB280-404355/1-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:01:57 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:02

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.988 1.045 -0.057 1.000 716744 9.60 1534
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.988 1.045 -0.057 716744 10.0 1534

Report Date: 09-Feb-2018 12:02:00

Chrom Revision: 2.2 24-Jan-2018 15:37:30

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfpo718B09014.d

Injection Date: 09-Feb-2018 09:21:34

Instrument ID: LC_LCMS7

Lims ID: MB 280-404355/1-A

Client ID:

Operator ID: JBH

ALS Bottle#: 12 Worklist Smp#: 4

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

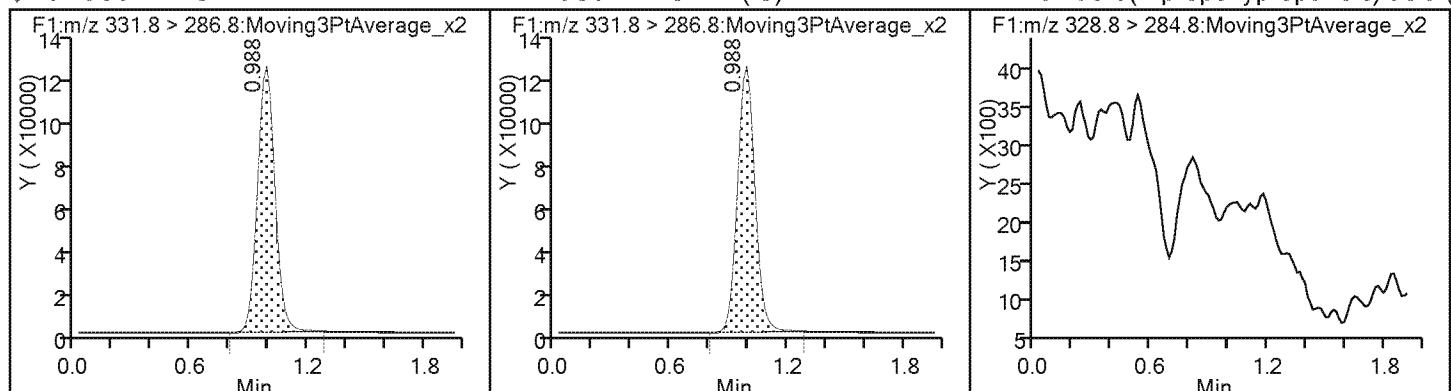
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (ND)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09014.d
 Lims ID: MB 280-404355/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 09-Feb-2018 09:21:34 ALS Bottle#: 12 Worklist Smp#: 4
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: MB280-404355/1-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:01:57 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:02

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	9.60	96.00

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: ICB 280-390728/11

Matrix: Water Lab File ID: hfpo717J10034.d

Analysis Method: 8321A Date Collected: _____

Extraction Method: _____ Date Extracted: _____

Sample wt/vol: 1 (mL) Date Analyzed: 10/10/2017 10:01

Con. Extract Vol.: _____ Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 390728 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.50		0.50	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	100		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10034.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 10-Oct-2017 10:01:21 ALS Bottle#: 1 Worklist Smp#: 11
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: ICB
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:51:51 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:51:12

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.880 0.880 0.0 1.000 732194 10.0 425
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.880 0.880 0.0 1.000 732194 10.0 425
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.880 0.885 -0.005 1.000 13993 -0.0270 8.1

Reagents:

HFPO_CAL-0_00031 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20171010-63483.b\\hfp0717J10034.d

Injection Date: 10-Oct-2017 10:01:21 Instrument ID: LC_LCMS7

Lims ID: ICB

Client ID:

Operator ID: JBH

ALS Bottle#: 1 Worklist Smp#: 11

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

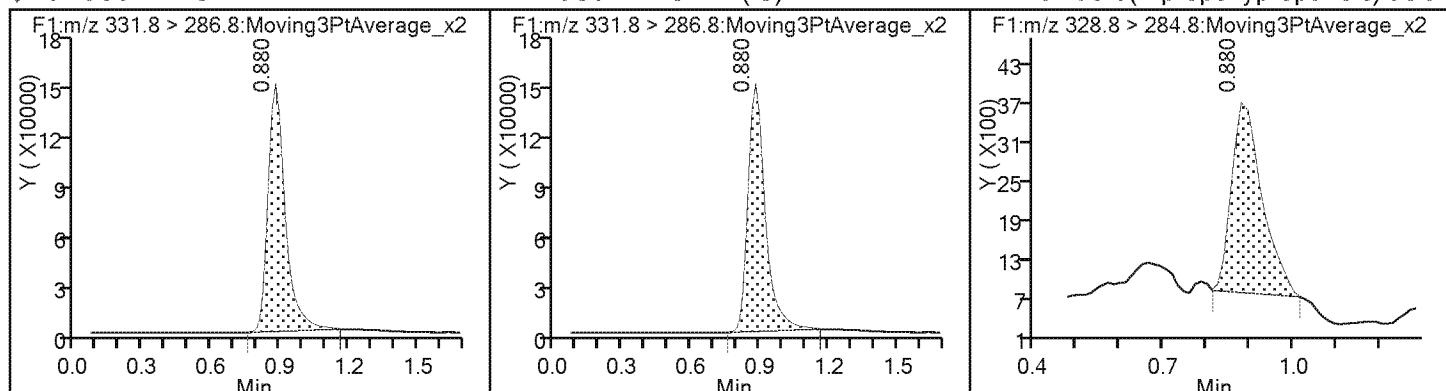
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10034.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 10-Oct-2017 10:01:21 ALS Bottle#: 1 Worklist Smp#: 11
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: ICB
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:51:51 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:51:12

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.0	100.10

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: ICB 280-404345/12

Matrix: Water Lab File ID: hfpo718B08043.d

Analysis Method: 8321A Date Collected: _____

Extraction Method: _____ Date Extracted: _____

Sample wt/vol: 1 (mL) Date Analyzed: 02/08/2018 13:34

Con. Extract Vol.: _____ Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 404345 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.50		0.50	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	103		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08043.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 08-Feb-2018 13:34:46 ALS Bottle#: 1 Worklist Smp#: 12
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: ICB
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:17 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:42

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
331.8 > 286.8 1.056 1.045 0.011 1.000 772269 10.3 1251

* 2 13C3 HFPO-DA (IS)
331.8 > 286.8 1.056 1.045 0.011 772269 10.0 1251

Reagents:

HFPO_CAL-0_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08043.d

Injection Date: 08-Feb-2018 13:34:46

Instrument ID: LC_LCMS7

Lims ID: ICB

Client ID:

Operator ID: JBH

ALS Bottle#: 1 Worklist Smp#: 12

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

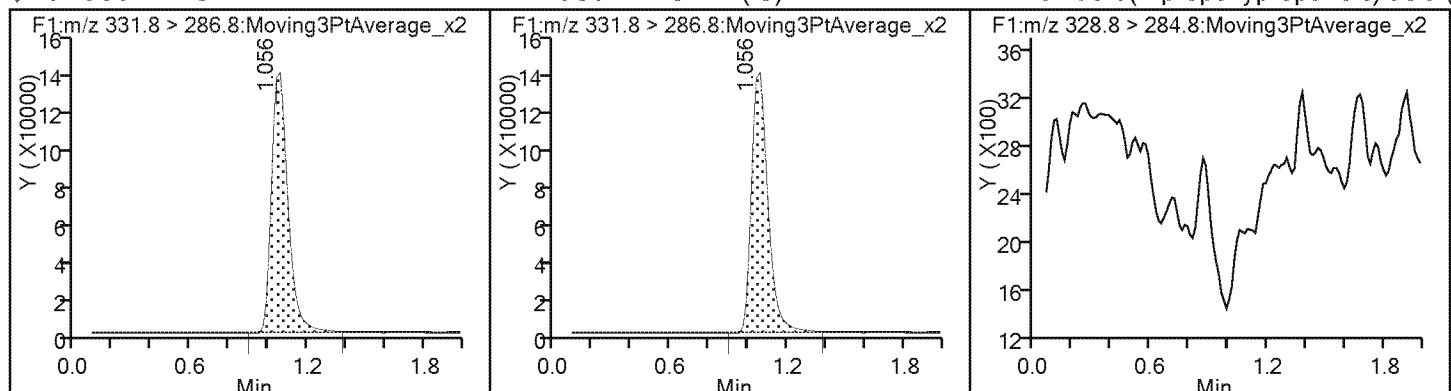
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (ND)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08043.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 08-Feb-2018 13:34:46 ALS Bottle#: 1 Worklist Smp#: 12
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: ICB
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:17 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:19:42

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.3	103.44

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 280-403988/2-A

Matrix: Water Lab File ID: hfpo718B07005.d

Analysis Method: 8321A Date Collected: _____

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 250 (mL) Date Analyzed: 02/07/2018 08:23

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.173		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	99		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07005.d
 Lims ID: LCS 280-403988/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 07-Feb-2018 08:23:13 ALS Bottle#: 12 Worklist Smp#: 5
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LCS280-403988/2-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:22:56 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:18:50

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.947 0.961 -0.014 1.000 725221 9.91 2040
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.947 0.961 -0.014 725221 10.0 2040
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.961 0.988 -0.027 1.000 650430 8.65 481

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfp0718B07005.d

Injection Date: 07-Feb-2018 08:23:13 Instrument ID: LC_LCMS7

Lims ID: LCS 280-403988/2-A

Client ID:

Operator ID: JBH

ALS Bottle#: 12 Worklist Smp#: 5

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

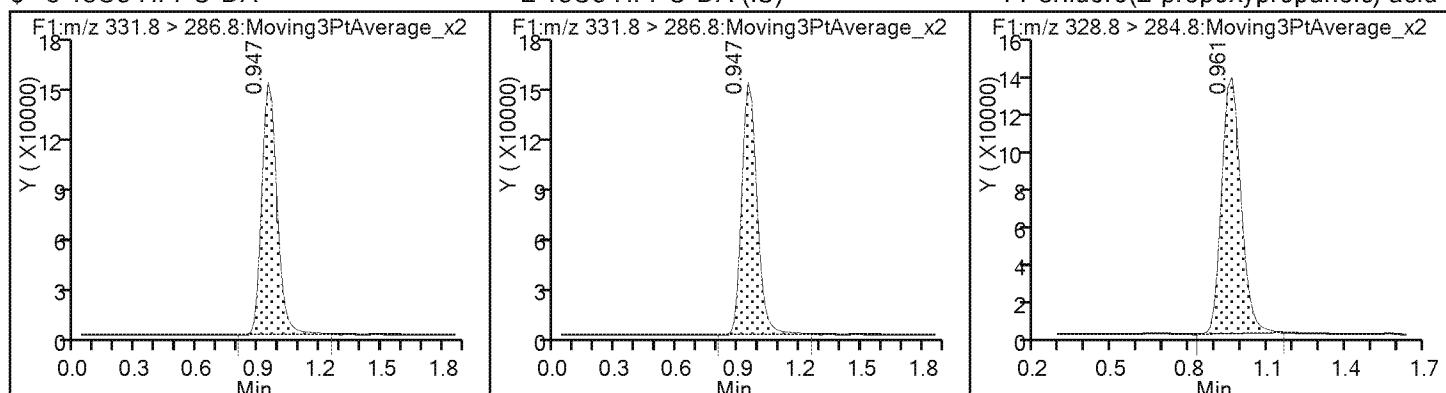
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07005.d
 Lims ID: LCS 280-403988/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 07-Feb-2018 08:23:13 ALS Bottle#: 12 Worklist Smp#: 5
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LCS280-403988/2-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:22:56 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:18:50

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	9.91	99.15

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 280-404157/2-A

Matrix: Water Lab File ID: hfpo718B08047.d

Analysis Method: 8321A Date Collected: _____

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 250 (mL) Date Analyzed: 02/08/2018 13:47

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.160		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	112		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08047.d
 Lims ID: LCS 280-404157/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 08-Feb-2018 13:47:43 ALS Bottle#: 13 Worklist Smp#: 16
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LCS280-404157/2-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:46

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.975 1.045 -0.070 1.000 839755 11.2 1245
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.975 1.045 -0.070 1.000 839755 10.0 1245
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 1.056 -0.081 1.000 716242 7.98 269

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08047.d

Injection Date: 08-Feb-2018 13:47:43

Instrument ID: LC_LCMS7

Lims ID: LCS 280-404157/2-A

Client ID:

Operator ID: JBH

ALS Bottle#: 13 Worklist Smp#: 16

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

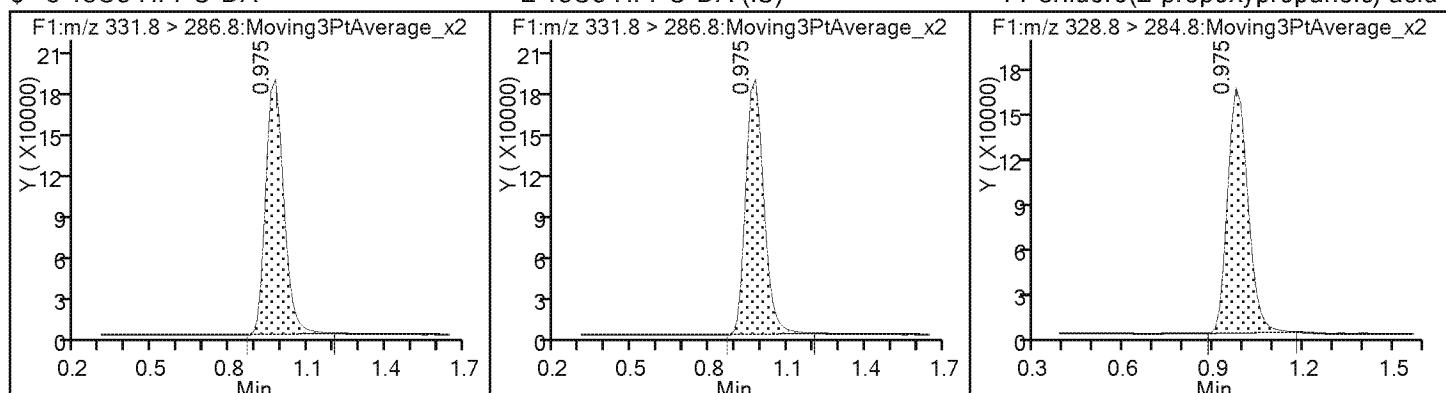
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08047.d
 Lims ID: LCS 280-404157/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 08-Feb-2018 13:47:43 ALS Bottle#: 13 Worklist Smp#: 16
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LCS280-404157/2-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:46

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.2	112.48

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 280-404355/2-A

Matrix: Water Lab File ID: hfpo718B09015.d

Analysis Method: 8321A Date Collected: _____

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 250 (mL) Date Analyzed: 02/09/2018 09:24

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.227		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	92		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09015.d
 Lims ID: LCS 280-404355/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 09-Feb-2018 09:24:48 ALS Bottle#: 13 Worklist Smp#: 5
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LCS280-404355/2-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:01:57 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:04

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.934 1.045 -0.111 1.000 684218 9.16 1527
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.934 1.045 -0.111 1.000 684218 10.0 1527
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.934 1.056 -0.122 1.000 830317 11.4 281

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfp0718B09015.d

Injection Date: 09-Feb-2018 09:24:48

Instrument ID: LC_LCMS7

Lims ID: LCS 280-404355/2-A

Client ID:

Operator ID: JBH

ALS Bottle#: 13 Worklist Smp#: 5

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

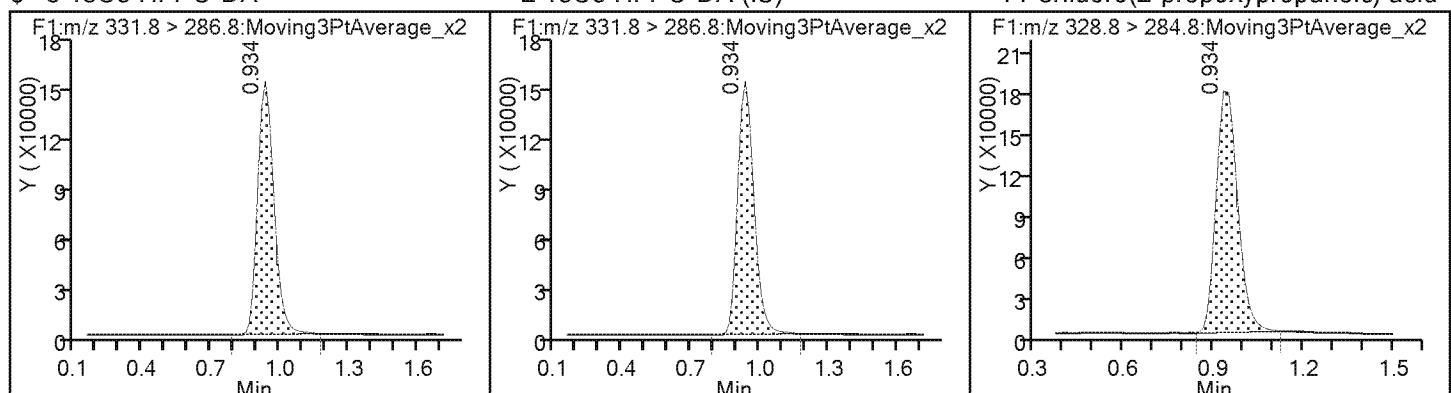
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09015.d
 Lims ID: LCS 280-404355/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 09-Feb-2018 09:24:48 ALS Bottle#: 13 Worklist Smp#: 5
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LCS280-404355/2-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:01:57 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:04

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	9.16	91.64

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCSD 280-403988/3-A

Matrix: Water Lab File ID: hfpo718B07006.d

Analysis Method: 8321A Date Collected: _____

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 250 (mL) Date Analyzed: 02/07/2018 08:26

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.171		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	102		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07006.d
 Lims ID: LCSD 280-403988/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 07-Feb-2018 08:26:28 ALS Bottle#: 13 Worklist Smp#: 6
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LCSD280-403988/3-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:22:56 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:18:54

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA								
331.8 > 286.8	0.961	0.961	0.0	1.000	746634	10.2	1521	
* 2 13C3 HFPO-DA (IS)								
331.8 > 286.8	0.961	0.961	0.0		746634	10.0	1521	
1 Perfluoro(2-propoxypropanoic) acid								
328.8 > 284.8	0.961	0.988	-0.027	1.000	662209	8.55	248	

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfp0718B07006.d

Injection Date: 07-Feb-2018 08:26:28 Instrument ID: LC_LCMS7

Lims ID: LCSD 280-403988/3-A

Client ID:

Operator ID: JBH ALS Bottle#: 13 Worklist Smp#: 6

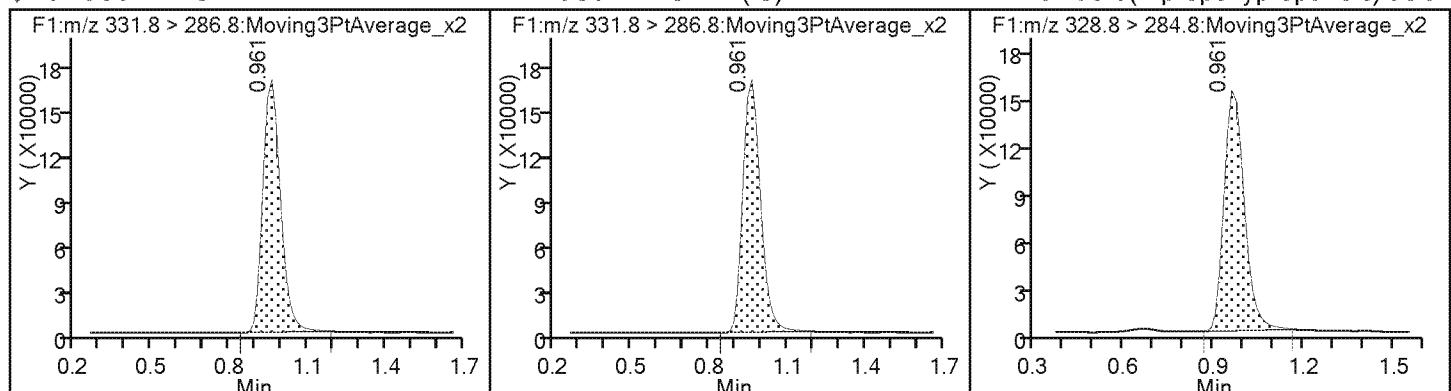
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07006.d
 Lims ID: LCSD 280-403988/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 07-Feb-2018 08:26:28 ALS Bottle#: 13 Worklist Smp#: 6
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LCSD280-403988/3-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:22:56 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:18:54

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.2	102.08

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCSD 280-404157/3-A

Matrix: Water Lab File ID: hfpo718B08048.d

Analysis Method: 8321A Date Collected: _____

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 250 (mL) Date Analyzed: 02/08/2018 13:50

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.160		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	119		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08048.d
 Lims ID: LCSD 280-404157/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 08-Feb-2018 13:50:57 ALS Bottle#: 14 Worklist Smp#: 17
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LCSD280-404157/3-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:48

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 892010 11.9 1503
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 892010 10.0 1503
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 1.056 -0.081 1.000 764000 8.02 221

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08048.d

Injection Date: 08-Feb-2018 13:50:57 Instrument ID: LC_LCMS7

Lims ID: LCSD 280-404157/3-A

Client ID:

Operator ID: JBH

ALS Bottle#: 14 Worklist Smp#: 17

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

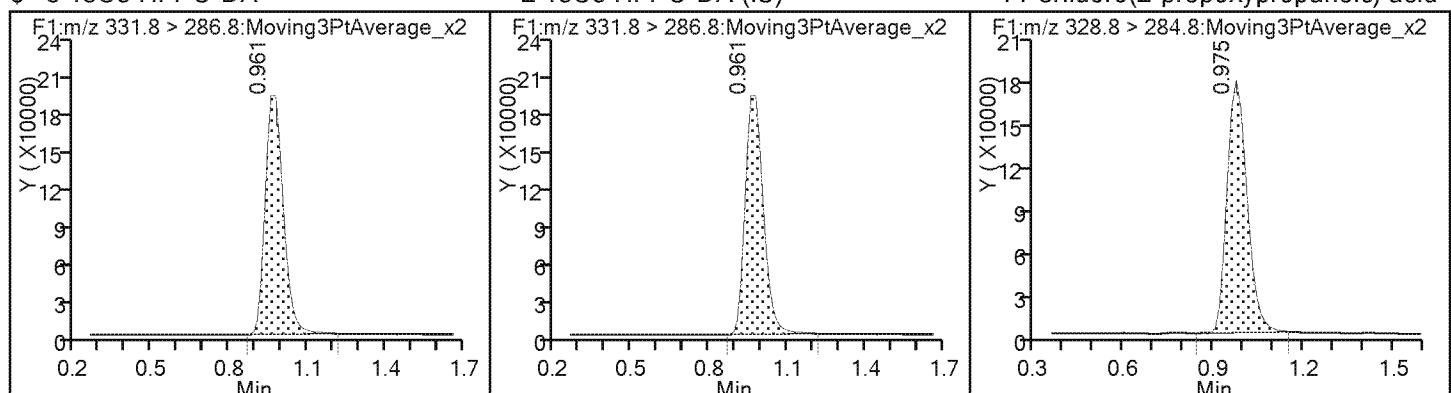
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08048.d
 Lims ID: LCSD 280-404157/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 08-Feb-2018 13:50:57 ALS Bottle#: 14 Worklist Smp#: 17
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LCSD280-404157/3-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:48

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.9	119.48

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCSD 280-404355/3-A

Matrix: Water Lab File ID: hfpo718B09016.d

Analysis Method: 8321A Date Collected: _____

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 250 (mL) Date Analyzed: 02/09/2018 09:28

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.212		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	105		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09016.d
 Lims ID: LCSD 280-404355/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 09-Feb-2018 09:28:03 ALS Bottle#: 14 Worklist Smp#: 6
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LCSD280-404355/3-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:01:57 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:07

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.920 1.045 -0.125 1.000 782370 10.5 1231
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.920 1.045 -0.125 1.000 782370 10.0 1231
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.920 1.056 -0.136 1.000 885291 10.6 281

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfp0718B09016.d

Injection Date: 09-Feb-2018 09:28:03

Instrument ID: LC_LCMS7

Lims ID: LCSD 280-404355/3-A

Client ID:

Operator ID: JBH

ALS Bottle#: 14 Worklist Smp#: 6

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

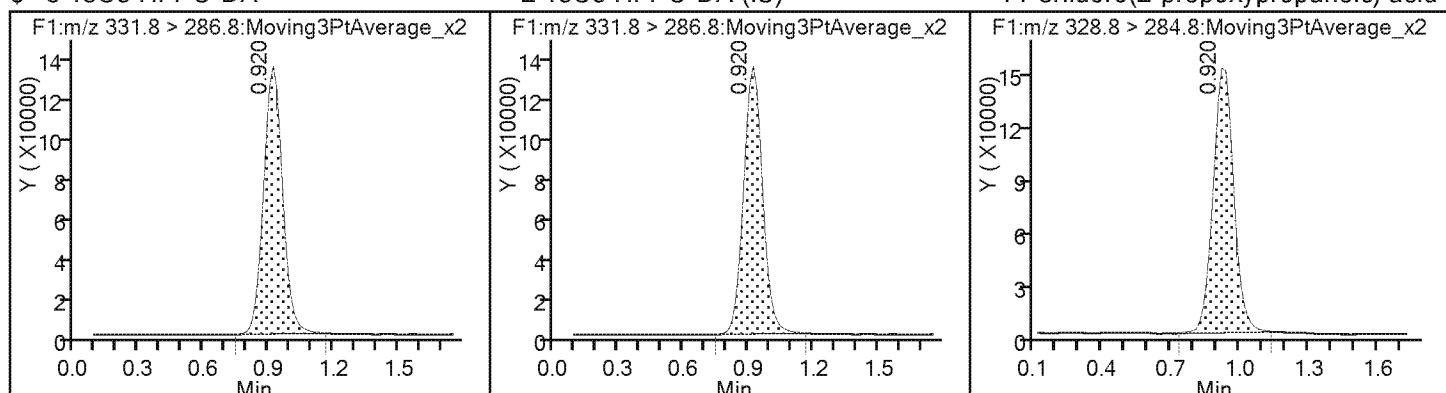
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09016.d
 Lims ID: LCSD 280-404355/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 09-Feb-2018 09:28:03 ALS Bottle#: 14 Worklist Smp#: 6
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LCSD280-404355/3-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:01:57 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.5	104.79

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LLCS 280-403988/4-A

Matrix: Water Lab File ID: hfpo718B07007.d

Analysis Method: 8321A Date Collected: _____

Extraction Method: 3535 Date Extracted: 02/06/2018 09:31

Sample wt/vol: 250 (mL) Date Analyzed: 02/07/2018 08:29

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.0139		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	102		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07007.d
 Lims ID: LLCS 280-403988/4-A
 Client ID:
 Sample Type: LLCS
 Inject. Date: 07-Feb-2018 08:29:43 ALS Bottle#: 14 Worklist Smp#: 7
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LLCS280-403988/4-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:22:56 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:19:36

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 0.961 0.0 1.000 746240 10.2 1462
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 0.961 0.0 1.000 746240 10.0 1462
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.961 0.988 -0.027 1.000 68800 0.6951 27.0

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180207-67040.b\\hfpo718B07007.d

Injection Date: 07-Feb-2018 08:29:43 Instrument ID: LC_LCMS7

Lims ID: LLCS 280-403988/4-A

Client ID:

Operator ID: JBH ALS Bottle#: 14 Worklist Smp#: 7

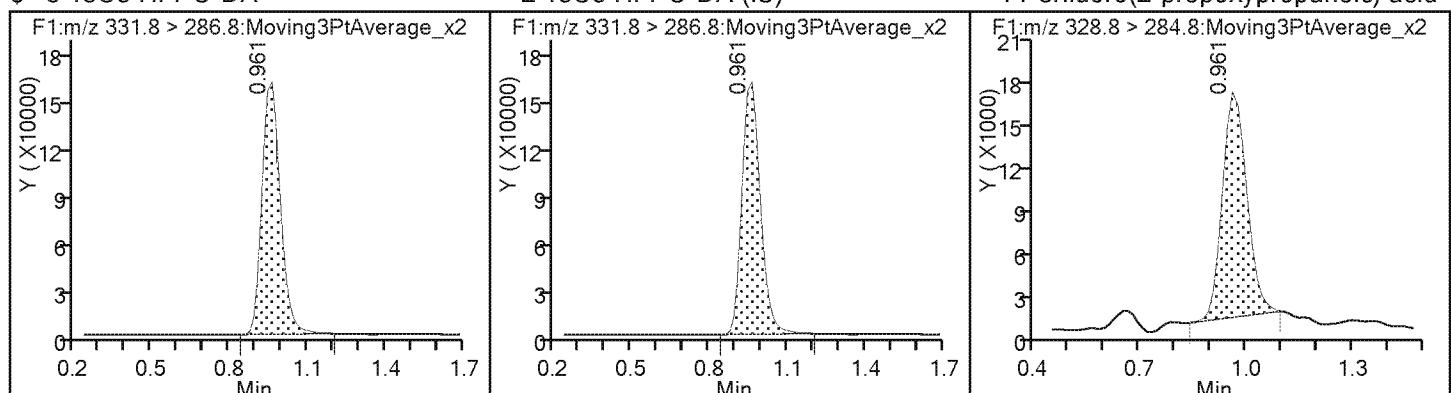
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\hfpo718B07007.d
 Lims ID: LLCS 280-403988/4-A
 Client ID:
 Sample Type: LLCS
 Inject. Date: 07-Feb-2018 08:29:43 ALS Bottle#: 14 Worklist Smp#: 7
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LLCS280-403988/4-A
 Misc. Info.: HFPO18B07
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180207-67040.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 07-Feb-2018 11:22:56 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK030

First Level Reviewer: meyera Date: 07-Feb-2018 11:19:36

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.2	102.02

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LLCS 280-404157/4-A

Matrix: Water Lab File ID: hfpo718B08049.d

Analysis Method: 8321A Date Collected: _____

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 250 (mL) Date Analyzed: 02/08/2018 13:54

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.0148		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	119		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08049.d
 Lims ID: LLCS 280-404157/4-A
 Client ID:
 Sample Type: LLCS
 Inject. Date: 08-Feb-2018 13:54:12 ALS Bottle#: 15 Worklist Smp#: 18
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LLCS280-404157/4-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:51

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.961 1.045 -0.084 1.000 887377 11.9 1753
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.961 1.045 -0.084 1.000 887377 10.0 1753
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.961 1.056 -0.095 1.000 73029 0.7397 23.1

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08049.d

Injection Date: 08-Feb-2018 13:54:12 Instrument ID: LC_LCMS7

Lims ID: LLCS 280-404157/4-A

Client ID:

Operator ID: JBH

ALS Bottle#: 15 Worklist Smp#: 18

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

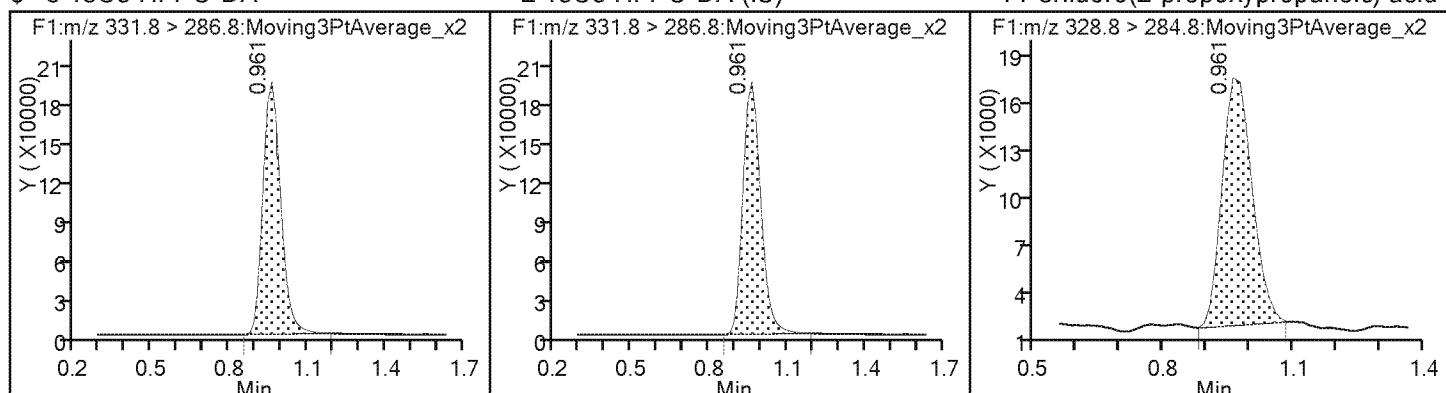
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08049.d
 Lims ID: LLCS 280-404157/4-A
 Client ID:
 Sample Type: LLCS
 Inject. Date: 08-Feb-2018 13:54:12 ALS Bottle#: 15 Worklist Smp#: 18
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LLCS280-404157/4-A
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:51

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.9	118.86

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LLCS 280-404355/4-A

Matrix: Water Lab File ID: hfpo718B09017.d

Analysis Method: 8321A Date Collected: _____

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 250 (mL) Date Analyzed: 02/09/2018 09:31

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.0203		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	92		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09017.d
 Lims ID: LLCS 280-404355/4-A
 Client ID:
 Sample Type: LLCS
 Inject. Date: 09-Feb-2018 09:31:18 ALS Bottle#: 15 Worklist Smp#: 7
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LLCS280-404355/4-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:01:57 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:09

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.920 1.045 -0.125 1.000 687459 9.21 1708
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.920 1.045 -0.125 687459 10.0 1708
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.934 1.056 -0.122 1.000 76686 1.01 18.7

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfp0718B09017.d

Injection Date: 09-Feb-2018 09:31:18 Instrument ID: LC_LCMS7

Lims ID: LLCS 280-404355/4-A

Client ID:

Operator ID: JBH ALS Bottle#: 15 Worklist Smp#: 7

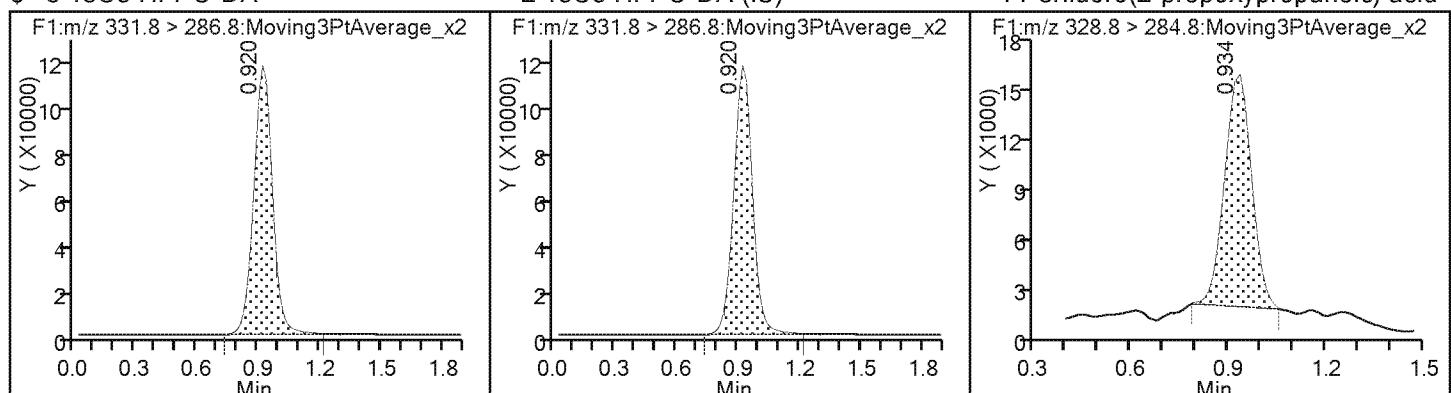
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09017.d
 Lims ID: LLCS 280-404355/4-A
 Client ID:
 Sample Type: LLCS
 Inject. Date: 09-Feb-2018 09:31:18 ALS Bottle#: 15 Worklist Smp#: 7
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: LLCS280-404355/4-A
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:01:57 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 11:59:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	9.21	92.08

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: DLCK 280-390728/12

Matrix: Water Lab File ID: hfpo717J10035.d

Analysis Method: 8321A Date Collected: _____

Extraction Method: _____ Date Extracted: _____

Sample wt/vol: 1 (mL) Date Analyzed: 10/10/2017 10:04

Con. Extract Vol.: _____ Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 390728 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.50		0.50	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	102		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10035.d
 Lims ID: DLCK
 Client ID:
 Sample Type: DLCK
 Inject. Date: 10-Oct-2017 10:04:34 ALS Bottle#: 2 Worklist Smp#: 12
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: DLCK
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:51:51 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM

Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:51:31

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.880 0.880 0.0 1.000 749614 10.2 480
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.880 0.880 0.0 1.000 749614 10.0 480
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.893 0.885 0.008 1.000 31104 0.1941 16.6

Reagents:

HFPO_CAL-1_00031 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20171010-63483.b\\hfp0717J10035.d

Injection Date: 10-Oct-2017 10:04:34 Instrument ID: LC_LCMS7

Lims ID: DLCK

Client ID:

Operator ID: JBH

ALS Bottle#: 2 Worklist Smp#: 12

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

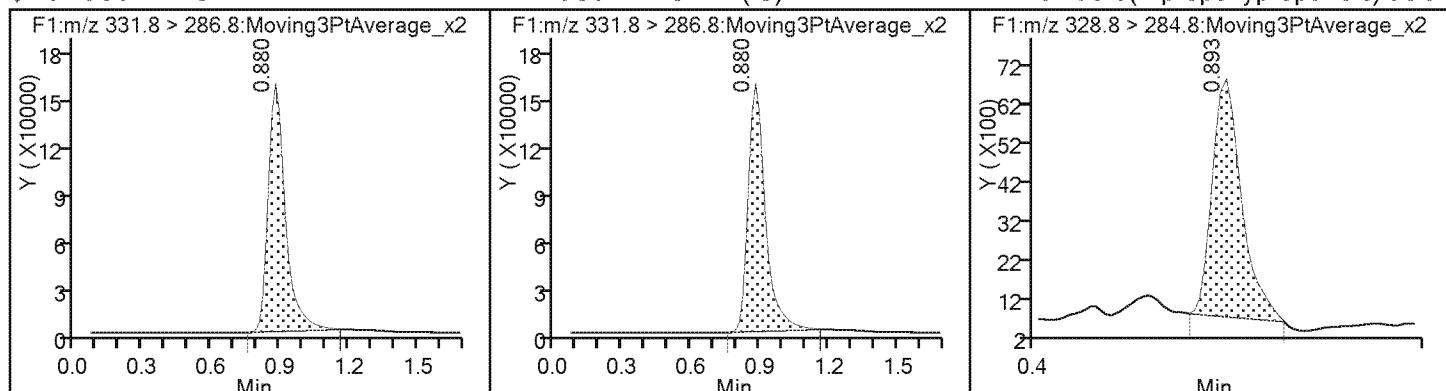
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10035.d
 Lims ID: DLCK
 Client ID:
 Sample Type: DLCK
 Inject. Date: 10-Oct-2017 10:04:34 ALS Bottle#: 2 Worklist Smp#: 12
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: DLCK
 Misc. Info.: HFPO17J10
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 10-Oct-2017 12:51:51 Calib Date: 10-Oct-2017 09:58:07
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20171010-63483.b\hfpo717J10033.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK005

First Level Reviewer: meyera Date: 10-Oct-2017 11:51:31

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.2	102.48

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: DLCK 280-404345/13

Matrix: Water Lab File ID: hfpo718B08044.d

Analysis Method: 8321A Date Collected: _____

Extraction Method: _____ Date Extracted: _____

Sample wt/vol: 1 (mL) Date Analyzed: 02/08/2018 13:38

Con. Extract Vol.: _____ Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 404345 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	<0.50		0.50	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	104		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08044.d
 Lims ID: DLCK
 Client ID:
 Sample Type: DLCK
 Inject. Date: 08-Feb-2018 13:38:01 ALS Bottle#: 2 Worklist Smp#: 13
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: DLCK
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:17 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:32

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA								
331.8 > 286.8	1.056	1.045	0.011	1.000	776147	10.4	1241	
* 2 13C3 HFPO-DA (IS)								
331.8 > 286.8	1.056	1.045	0.011		776147	10.0	1241	
1 Perfluoro(2-propoxypropanoic) acid							M	
328.8 > 284.8	1.056	1.056	0.0	1.000	21424	0.2255	2.8	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HFPO_CAL-1_00032 Amount Added: 1.00 Units: mL

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08044.d

Injection Date: 08-Feb-2018 13:38:01

Instrument ID: LC_LCMS7

Lims ID: DLCK

Client ID:

Operator ID: JBH

ALS Bottle#: 2 Worklist Smp#: 13

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

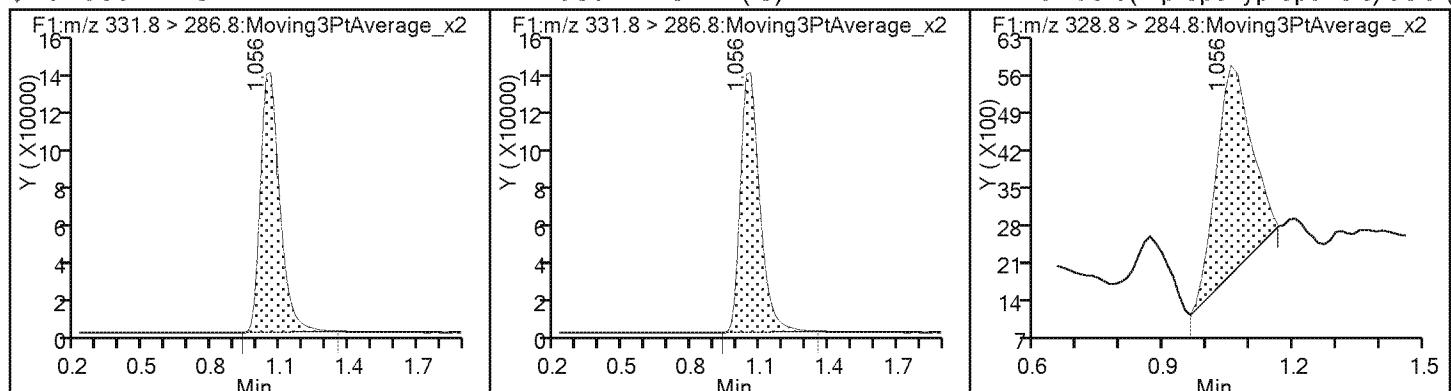
Method: HFPO

Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid (M)



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08044.d
 Lims ID: DLCK
 Client ID:
 Sample Type: DLCK
 Inject. Date: 08-Feb-2018 13:38:01 ALS Bottle#: 2 Worklist Smp#: 13
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: DLCK
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:17 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:20:32

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	10.4	103.96

TestAmerica Denver

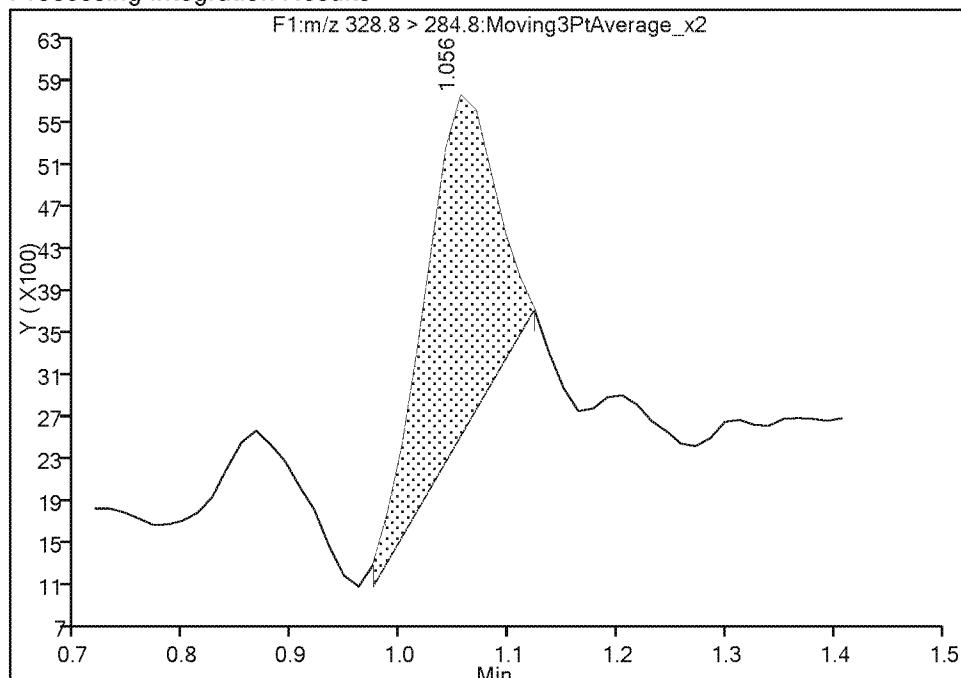
Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08044.d
 Injection Date: 08-Feb-2018 13:38:01 Instrument ID: LC_LCMS7
 Lims ID: DLCK
 Client ID:
 Operator ID: JBH ALS Bottle#: 2 Worklist Smp#: 13
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Method: HFPO Limit Group: LC - 8321A_HFPO_Du
 Column: Detector F1:MRM

1 Perfluoro(2-propoxypropanoic) acid, CAS: 13252-13-6

Signal: 1

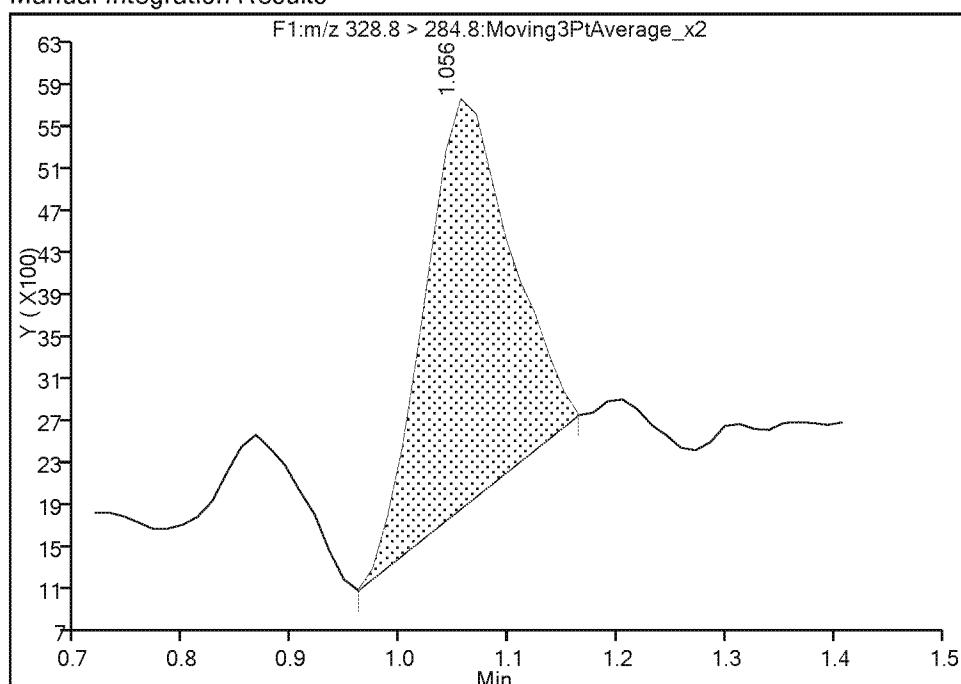
RT: 1.06
 Area: 14614
 Amount: 0.143034
 Amount Units: ug/l

Processing Integration Results



RT: 1.06
 Area: 21424
 Amount: 0.225513
 Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 08-Feb-2018 15:20:27

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-170MEDOW-W1-1-01301 Lab Sample ID: 280-105950-14 MS
8 MS

Matrix: Water Lab File ID: hfpo718B08055.d

Analysis Method: 8321A Date Collected: 01/30/2018 09:17

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 252.1 (mL) Date Analyzed: 02/08/2018 14:13

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.183		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	112		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08055.d
 Lims ID: 280-105950-G-14-A MS
 Client ID: FAY-D-170MEDOW-W1-1-013018
 Sample Type: MS
 Inject. Date: 08-Feb-2018 14:13:42 ALS Bottle#: 21 Worklist Smp#: 24
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-G-14-AMS
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:26

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
--------	----	--------	--------	--------	----------	-------------	-----	-------

\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.975 1.045 -0.070 1.000 835010 11.2 1401
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.975 1.045 -0.070 1.000 835010 10.0 1401
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.988 1.056 -0.068 1.000 821879 9.22 111

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfp0718B08055.d

Injection Date: 08-Feb-2018 14:13:42 Instrument ID: LC_LCMS7

Lims ID: 280-105950-G-14-A MS

Client ID: FAY-D-170MEDOW-W1-1-013018

Operator ID: JBH ALS Bottle#: 21 Worklist Smp#: 24

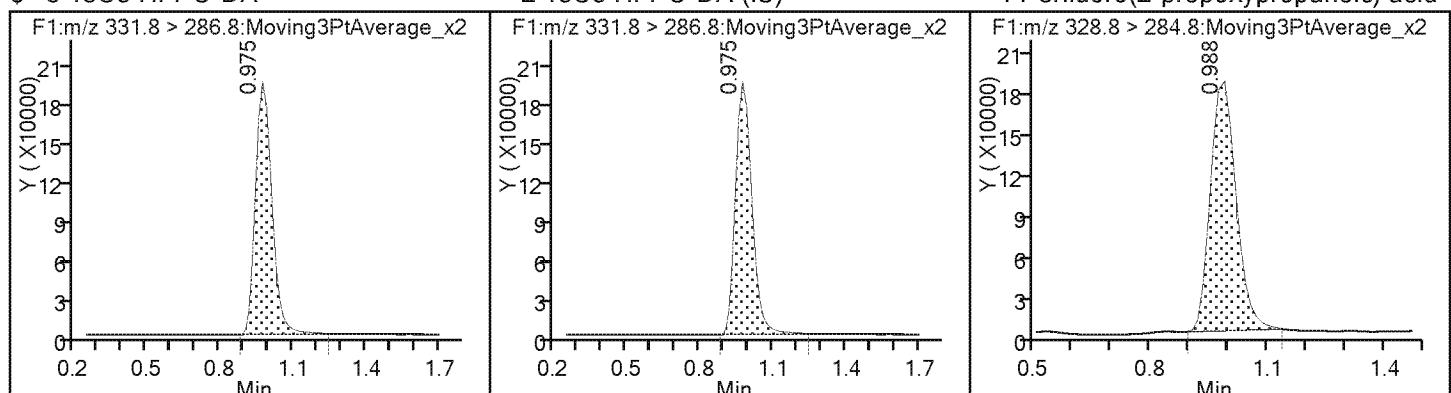
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08055.d
 Lims ID: 280-105950-G-14-A MS
 Client ID: FAY-D-170MEDOW-W1-1-013018
 Sample Type: MS
 Inject. Date: 08-Feb-2018 14:13:42 ALS Bottle#: 21 Worklist Smp#: 24
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-G-14-AMS
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.2	111.84

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3624PNEBR-W1-2-0130 Lab Sample ID: 280-105950-40 MS
18 MS

Matrix: Water Lab File ID: hfpo718B09041.d

Analysis Method: 8321A Date Collected: 01/30/2018 15:45

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 261.9 (mL) Date Analyzed: 02/09/2018 10:49

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.261		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	119		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09041.d
 Lims ID: 280-105950-C-40-A MS
 Client ID: FAY-D-3624PineB-W1-2-013018
 Sample Type: MS
 Inject. Date: 09-Feb-2018 10:49:23 ALS Bottle#: 37 Worklist Smp#: 31
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-40-AMS
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:43

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.907 1.045 -0.138 1.000 886604 11.9 918
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.907 1.045 -0.138 1.000 886604 10.0 918
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.920 1.056 -0.136 1.000 1290980 13.7 109

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfpo718B09041.d

Injection Date: 09-Feb-2018 10:49:23 Instrument ID: LC_LCMS7

Lims ID: 280-105950-C-40-A MS

Client ID: FAY-D-3624PineB-W1-2-013018

Operator ID: JBH ALS Bottle#: 37 Worklist Smp#: 31

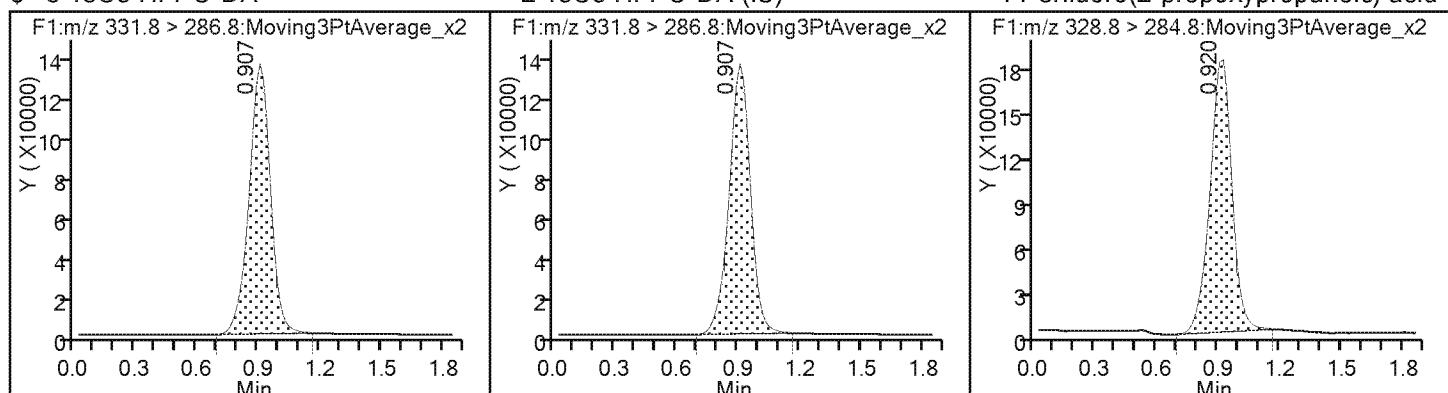
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09041.d
 Lims ID: 280-105950-C-40-A MS
 Client ID: FAY-D-3624PineB-W1-2-013018
 Sample Type: MS
 Inject. Date: 09-Feb-2018 10:49:23 ALS Bottle#: 37 Worklist Smp#: 31
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-C-40-AMS
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.9	118.75

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-170MEDOW-W1-1-01301 Lab Sample ID: 280-105950-14 DU
8 DU

Matrix: Water Lab File ID: hfpo718B08054.d

Analysis Method: 8321A Date Collected: 01/30/2018 09:17

Extraction Method: 3535 Date Extracted: 02/07/2018 10:33

Sample wt/vol: 229.3 (mL) Date Analyzed: 02/08/2018 14:10

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404346 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.0220		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	112		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08054.d
 Lims ID: 280-105950-D-14-A DU
 Client ID: FAY-D-170MEDOW-W1-1-013018
 Sample Type: DU
 Inject. Date: 08-Feb-2018 14:10:26 ALS Bottle#: 20 Worklist Smp#: 23
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-14-ADU
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

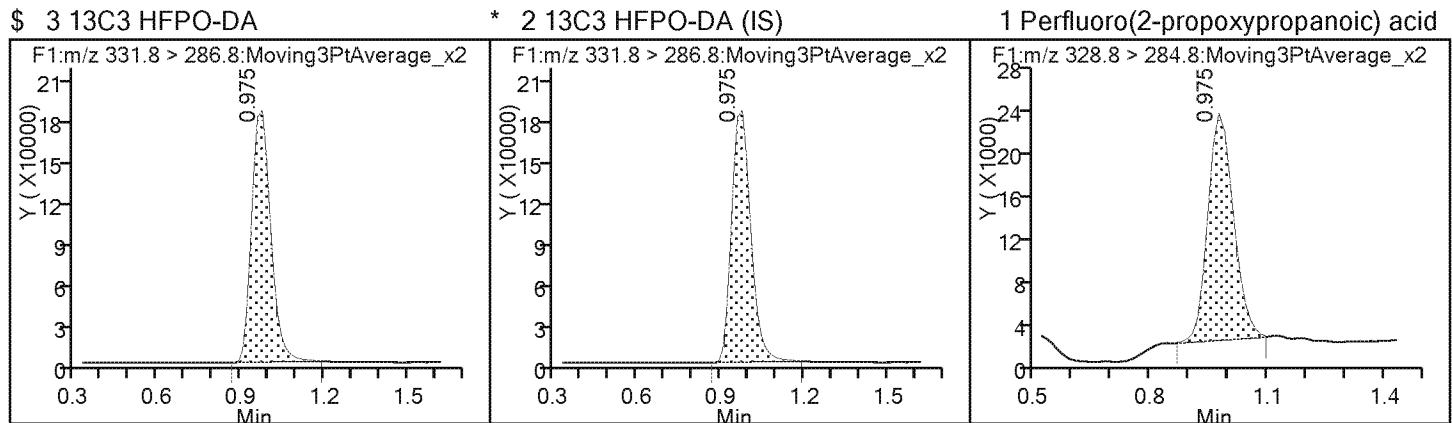
First Level Reviewer: meyera Date: 08-Feb-2018 15:22:24

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.975 1.045 -0.070 1.000 834475 11.2 1369
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.975 1.045 -0.070 1.000 834475 10.0 1369
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.975 1.056 -0.081 1.000 92671 1.01 14.8

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180208-67079.b\\hfpo718B08054.d
Injection Date: 08-Feb-2018 14:10:26 Instrument ID: LC_LCMS7
Lims ID: 280-105950-D-14-A DU
Client ID: FAY-D-170MEDOW-W1-1-013018
Operator ID: JBH ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: HFPO Limit Group: LC - 8321A_HFPO_Du



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08054.d
 Lims ID: 280-105950-D-14-A DU
 Client ID: FAY-D-170MEDOW-W1-1-013018
 Sample Type: DU
 Inject. Date: 08-Feb-2018 14:10:26 ALS Bottle#: 20 Worklist Smp#: 23
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-D-14-ADU
 Misc. Info.: HFPO18B08
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 08-Feb-2018 15:24:19 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 08-Feb-2018 15:22:24

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	11.2	111.77

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-105950-1

SDG No.: _____

Client Sample ID: FAY-D-3624PNEBR-W1-2-0130 Lab Sample ID: 280-105950-40 DU
18 DU

Matrix: Water Lab File ID: hfpo718B09040.d

Analysis Method: 8321A Date Collected: 01/30/2018 15:45

Extraction Method: 3535 Date Extracted: 02/08/2018 17:57

Sample wt/vol: 268.5 (mL) Date Analyzed: 02/09/2018 10:46

Con. Extract Vol.: 5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Synergi Hydro ID: _____

% Moisture: GPC Cleanup: (Y/N) N

Analysis Batch No.: 404457 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
13252-13-6	HFPO-DA	0.109		0.010	

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL02255	13C3 HFPO-DA	89		50-200

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09040.d
 Lims ID: 280-105950-B-40-A DU
 Client ID: FAY-D-3624PineB-W1-2-013018
 Sample Type: DU
 Inject. Date: 09-Feb-2018 10:46:07 ALS Bottle#: 36 Worklist Smp#: 30
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-40-ADU
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM

Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:39

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
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\$ 3 13C3 HFPO-DA
 331.8 > 286.8 0.920 1.045 -0.125 1.000 666387 8.93 997
 * 2 13C3 HFPO-DA (IS)
 331.8 > 286.8 0.920 1.045 -0.125 666387 10.0 997
 1 Perfluoro(2-propoxypropanoic) acid
 328.8 > 284.8 0.920 1.056 -0.136 1.000 415669 5.83 44.8

TestAmerica Denver

Data File: \\ChromNA\\Denver\\ChromData\\LC_LCMS7\\20180209-67108.b\\hfpo718B09040.d

Injection Date: 09-Feb-2018 10:46:07 Instrument ID: LC_LCMS7

Lims ID: 280-105950-B-40-A DU

Client ID: FAY-D-3624PineB-W1-2-013018

Operator ID: JBH ALS Bottle#: 36 Worklist Smp#: 30

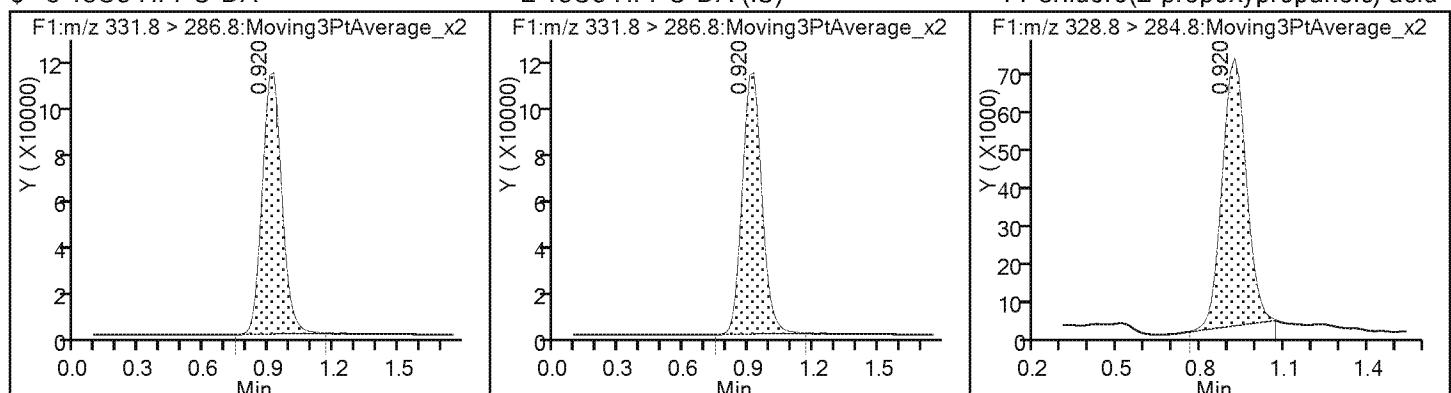
Injection Vol: 20.0 ul Dil. Factor: 1.0000

Method: HFPO Limit Group: LC - 8321A_HFPO_Du

\$ 3 13C3 HFPO-DA

* 2 13C3 HFPO-DA (IS)

1 Perfluoro(2-propoxypropanoic) acid



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\hfpo718B09040.d
 Lims ID: 280-105950-B-40-A DU
 Client ID: FAY-D-3624PineB-W1-2-013018
 Sample Type: DU
 Inject. Date: 09-Feb-2018 10:46:07 ALS Bottle#: 36 Worklist Smp#: 30
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 280-105950-B-40-ADU
 Misc. Info.: HFPO18B09
 Operator ID: JBH Instrument ID: LC_LCMS7
 Method: \\ChromNA\Denver\ChromData\LC_LCMS7\20180209-67108.b\HFPO.m
 Limit Group: LC - 8321A_HFPO_Du
 Last Update: 09-Feb-2018 12:02:25 Calib Date: 08-Feb-2018 13:31:32
 Integrator: Picker
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Denver\ChromData\LC_LCMS7\20180208-67079.b\hfpo718B08042.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK015

First Level Reviewer: meyera Date: 09-Feb-2018 12:00:39

Compound	Amount Added	Amount Recovered	% Rec.
\$ 3 13C3 HFPO-DA	10.0	8.93	89.26

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Instrument ID: LC_LCMS7

Start Date: 09/14/2017 14:40

Analysis Batch Number: 387775

End Date: 09/14/2017 16:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD001 280-387775/3 IC		09/14/2017 14:40	1	hfpo717I14052.d	Synergi Hydro
STD002 280-387775/4 IC		09/14/2017 14:43	1	hfpo717I14053.d	Synergi Hydro
STD003 280-387775/5 IC		09/14/2017 14:46	1	hfpo717I14054.d	Synergi Hydro
STD004 280-387775/6 IC		09/14/2017 14:49	1	hfpo717I14055.d	Synergi Hydro
STD005 280-387775/7 IC		09/14/2017 14:52	1	hfpo717I14056.d	Synergi Hydro
STD006 280-387775/8 IC		09/14/2017 14:55	1	hfpo717I14057.d	Synergi Hydro
STD007 280-387775/9 IC		09/14/2017 14:58	1	hfpo717I14058.d	Synergi Hydro
STD008 280-387775/10 IC		09/14/2017 15:01	1	hfpo717I14059.d	Synergi Hydro
ICB 280-387775/11		09/14/2017 15:04	1		Synergi Hydro
ZZZZZ		09/14/2017 15:07	1		Synergi Hydro
ICV 280-387775/13		09/14/2017 15:10	1	hfpo717I14062.d	Synergi Hydro
ZZZZZ		09/14/2017 15:13	1		Synergi Hydro
ZZZZZ		09/14/2017 15:16	1		Synergi Hydro
ZZZZZ		09/14/2017 15:19	1		Synergi Hydro
ZZZZZ		09/14/2017 15:22	1		Synergi Hydro
ZZZZZ		09/14/2017 15:25	2		Synergi Hydro
ZZZZZ		09/14/2017 15:28	1		Synergi Hydro
ZZZZZ		09/14/2017 15:31	1		Synergi Hydro
ZZZZZ		09/14/2017 15:34	1		Synergi Hydro
ZZZZZ		09/14/2017 15:38	1		Synergi Hydro
ZZZZZ		09/14/2017 15:41	1		Synergi Hydro
CCV 280-387775/24		09/14/2017 15:44	1		Synergi Hydro
ZZZZZ		09/14/2017 15:47	2		Synergi Hydro
ZZZZZ		09/14/2017 15:50	1		Synergi Hydro
ZZZZZ		09/14/2017 15:53	1		Synergi Hydro
ZZZZZ		09/14/2017 15:56	1		Synergi Hydro
ZZZZZ		09/14/2017 15:59	1		Synergi Hydro
ZZZZZ		09/14/2017 16:02	1		Synergi Hydro
CCV 280-387775/31		09/14/2017 16:05	1		Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Instrument ID: LC_LCMS7

Start Date: 10/10/2017 09:35

Analysis Batch Number: 390728

End Date: 10/10/2017 11:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD001 280-390728/3 IC		10/10/2017 09:35	1	hfpo717J10026.d	Synergi Hydro
STD002 280-390728/4 IC		10/10/2017 09:38	1	hfpo717J10027.d	Synergi Hydro
STD003 280-390728/5 IC		10/10/2017 09:41	1	hfpo717J10028.d	Synergi Hydro
STD004 280-390728/6 IC		10/10/2017 09:45	1	hfpo717J10029.d	Synergi Hydro
STD005 280-390728/7 IC		10/10/2017 09:48	1	hfpo717J10030.d	Synergi Hydro
STD006 280-390728/8 IC		10/10/2017 09:51	1	hfpo717J10031.d	Synergi Hydro
STD007 280-390728/9 IC		10/10/2017 09:54	1	hfpo717J10032.d	Synergi Hydro
STD008 280-390728/10 IC		10/10/2017 09:58	1	hfpo717J10033.d	Synergi Hydro
ICB 280-390728/11		10/10/2017 10:01	1	hfpo717J10034.d	Synergi Hydro
DLCK 280-390728/12		10/10/2017 10:04	1	hfpo717J10035.d	Synergi Hydro
ICV 280-390728/13		10/10/2017 10:07	1	hfpo717J10036.d	Synergi Hydro
ZZZZZ		10/10/2017 10:11	1		Synergi Hydro
ZZZZZ		10/10/2017 10:14	1		Synergi Hydro
ZZZZZ		10/10/2017 10:17	1		Synergi Hydro
ZZZZZ		10/10/2017 10:20	1		Synergi Hydro
ZZZZZ		10/10/2017 10:23	1		Synergi Hydro
ZZZZZ		10/10/2017 10:27	1		Synergi Hydro
ZZZZZ		10/10/2017 10:30	1		Synergi Hydro
ZZZZZ		10/10/2017 10:33	1		Synergi Hydro
ZZZZZ		10/10/2017 10:36	1		Synergi Hydro
ZZZZZ		10/10/2017 10:40	1		Synergi Hydro
CCV 280-390728/24		10/10/2017 10:43	1	hfpo717J10047.d	Synergi Hydro
ZZZZZ		10/10/2017 10:46	1		Synergi Hydro
ZZZZZ		10/10/2017 10:49	1		Synergi Hydro
ZZZZZ		10/10/2017 10:53	1		Synergi Hydro
ZZZZZ		10/10/2017 10:56	1		Synergi Hydro
ZZZZZ		10/10/2017 10:59	1		Synergi Hydro
ZZZZZ		10/10/2017 11:02	1		Synergi Hydro
ZZZZZ		10/10/2017 11:06	1		Synergi Hydro
ZZZZZ		10/10/2017 11:09	1		Synergi Hydro
ZZZZZ		10/10/2017 11:12	1		Synergi Hydro
ZZZZZ		10/10/2017 11:16	1		Synergi Hydro
CCV 280-390728/35		10/10/2017 11:19	1		Synergi Hydro

8321A

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Instrument ID: LC_LCMS7

Start Date: 02/07/2018 08:16

Analysis Batch Number: 404182

End Date: 02/07/2018 10:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-404182/3		02/07/2018 08:16	1	hfpo718B07003.d	Synergi Hydro
MB 280-403988/1-A		02/07/2018 08:19	1	hfpo718B07004.d	Synergi Hydro
LCS 280-403988/2-A		02/07/2018 08:23	1	hfpo718B07005.d	Synergi Hydro
LCSD 280-403988/3-A		02/07/2018 08:26	1	hfpo718B07006.d	Synergi Hydro
LLCS 280-403988/4-A		02/07/2018 08:29	1	hfpo718B07007.d	Synergi Hydro
ZZZZZ		02/07/2018 08:32	1		Synergi Hydro
ZZZZZ		02/07/2018 08:36	1		Synergi Hydro
ZZZZZ		02/07/2018 08:39	1		Synergi Hydro
ZZZZZ		02/07/2018 08:42	1		Synergi Hydro
ZZZZZ		02/07/2018 08:45	1		Synergi Hydro
ZZZZZ		02/07/2018 08:49	1		Synergi Hydro
CCV 280-404182/14		02/07/2018 08:52	1	hfpo718B07014.d	Synergi Hydro
ZZZZZ		02/07/2018 08:55	1		Synergi Hydro
ZZZZZ		02/07/2018 08:58	1		Synergi Hydro
ZZZZZ		02/07/2018 09:02	1		Synergi Hydro
ZZZZZ		02/07/2018 09:05	1		Synergi Hydro
280-105950-1		02/07/2018 09:08	1	hfpo718B07019.d	Synergi Hydro
280-105950-2		02/07/2018 09:11	1	hfpo718B07020.d	Synergi Hydro
280-105950-3		02/07/2018 09:15	1	hfpo718B07021.d	Synergi Hydro
280-105950-4		02/07/2018 09:18	1	hfpo718B07022.d	Synergi Hydro
280-105950-5		02/07/2018 09:21	1	hfpo718B07023.d	Synergi Hydro
280-105950-6		02/07/2018 09:25	1	hfpo718B07024.d	Synergi Hydro
CCV 280-404182/25		02/07/2018 09:28	1	hfpo718B07025.d	Synergi Hydro
280-105950-7		02/07/2018 09:31	1	hfpo718B07026.d	Synergi Hydro
280-105950-8		02/07/2018 09:34	1	hfpo718B07027.d	Synergi Hydro
280-105950-9		02/07/2018 09:38	1	hfpo718B07028.d	Synergi Hydro
280-105950-10		02/07/2018 09:41	1	hfpo718B07029.d	Synergi Hydro
280-105950-11		02/07/2018 09:44	1	hfpo718B07030.d	Synergi Hydro
280-105950-12		02/07/2018 09:47	1	hfpo718B07031.d	Synergi Hydro
CCV 280-404182/32		02/07/2018 09:51	1	hfpo718B07032.d	Synergi Hydro
ZZZZZ		02/07/2018 09:54	10		Synergi Hydro
ZZZZZ		02/07/2018 09:57	5		Synergi Hydro
ZZZZZ		02/07/2018 10:00	2		Synergi Hydro
ZZZZZ		02/07/2018 10:04	2		Synergi Hydro
ZZZZZ		02/07/2018 10:07	10		Synergi Hydro
CCV 280-404182/38		02/07/2018 10:10	1		Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Instrument ID: LC_LCMS7

Start Date: 02/08/2018 13:05

Analysis Batch Number: 404345

End Date: 02/08/2018 13:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD001 280-404345/3 IC		02/08/2018 13:05	1	hfpo718B08034.d	Synergi Hydro
STD002 280-404345/4 IC		02/08/2018 13:08	1	hfpo718B08035.d	Synergi Hydro
STD003 280-404345/5 IC		02/08/2018 13:12	1	hfpo718B08036.d	Synergi Hydro
STD004 280-404345/6 IC		02/08/2018 13:15	1	hfpo718B08037.d	Synergi Hydro
STD005 280-404345/7 IC		02/08/2018 13:18	1	hfpo718B08038.d	Synergi Hydro
STD006 280-404345/8 IC		02/08/2018 13:21	1	hfpo718B08039.d	Synergi Hydro
STD007 280-404345/9 IC		02/08/2018 13:25	1	hfpo718B08040.d	Synergi Hydro
STD008 280-404345/10 IC		02/08/2018 13:28	1	hfpo718B08041.d	Synergi Hydro
STD009 280-404345/11 IC		02/08/2018 13:31	1	hfpo718B08042.d	Synergi Hydro
ICB 280-404345/12		02/08/2018 13:34	1	hfpo718B08043.d	Synergi Hydro
DLCK 280-404345/13		02/08/2018 13:38	1	hfpo718B08044.d	Synergi Hydro
ICV 280-404345/14		02/08/2018 13:41	1	hfpo718B08045.d	Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Instrument ID: LC_LCMS7

Start Date: 02/08/2018 13:44

Analysis Batch Number: 404346

End Date: 02/08/2018 15:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
MB 280-404157/1-A		02/08/2018 13:44	1	hfpo718B08046.d	Synergi Hydro
LCS 280-404157/2-A		02/08/2018 13:47	1	hfpo718B08047.d	Synergi Hydro
LCSD 280-404157/3-A		02/08/2018 13:50	1	hfpo718B08048.d	Synergi Hydro
LLCS 280-404157/4-A		02/08/2018 13:54	1	hfpo718B08049.d	Synergi Hydro
ZZZZZ		02/08/2018 13:57	1		Synergi Hydro
ZZZZZ		02/08/2018 14:00	1		Synergi Hydro
280-105950-13		02/08/2018 14:03	1	hfpo718B08052.d	Synergi Hydro
280-105950-14		02/08/2018 14:07	1	hfpo718B08053.d	Synergi Hydro
280-105950-14 DU		02/08/2018 14:10	1	hfpo718B08054.d	Synergi Hydro
280-105950-14 MS		02/08/2018 14:13	1	hfpo718B08055.d	Synergi Hydro
CCV 280-404346/25		02/08/2018 14:16	1	hfpo718B08056.d	Synergi Hydro
280-105950-15		02/08/2018 14:20	1	hfpo718B08057.d	Synergi Hydro
280-105950-16		02/08/2018 14:23	1	hfpo718B08058.d	Synergi Hydro
280-105950-17		02/08/2018 14:26	1	hfpo718B08059.d	Synergi Hydro
280-105950-18		02/08/2018 14:29	1	hfpo718B08060.d	Synergi Hydro
280-105950-19		02/08/2018 14:33	1	hfpo718B08061.d	Synergi Hydro
280-105950-20		02/08/2018 14:36	1	hfpo718B08062.d	Synergi Hydro
280-105950-21		02/08/2018 14:39	1	hfpo718B08063.d	Synergi Hydro
280-105950-22		02/08/2018 14:42	1	hfpo718B08064.d	Synergi Hydro
280-105950-23		02/08/2018 14:46	1	hfpo718B08065.d	Synergi Hydro
280-105950-24		02/08/2018 14:49	1	hfpo718B08066.d	Synergi Hydro
CCV 280-404346/36		02/08/2018 14:52	1	hfpo718B08067.d	Synergi Hydro
280-105950-25		02/08/2018 14:56	1	hfpo718B08068.d	Synergi Hydro
280-105950-26		02/08/2018 14:59	1	hfpo718B08069.d	Synergi Hydro
280-105950-27		02/08/2018 15:02	1	hfpo718B08070.d	Synergi Hydro
280-105950-28		02/08/2018 15:05	1	hfpo718B08071.d	Synergi Hydro
280-105950-29		02/08/2018 15:09	1	hfpo718B08072.d	Synergi Hydro
280-105950-30		02/08/2018 15:12	1	hfpo718B08073.d	Synergi Hydro
CCV 280-404346/43		02/08/2018 15:15	1	hfpo718B08074.d	Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Instrument ID: LC_LCMS7

Start Date: 02/09/2018 09:18

Analysis Batch Number: 404457

End Date: 02/09/2018 10:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-404457/3		02/09/2018 09:18	1	hfpo718B09013.d	Synergi Hydro
MB 280-404355/1-A		02/09/2018 09:21	1	hfpo718B09014.d	Synergi Hydro
LCS 280-404355/2-A		02/09/2018 09:24	1	hfpo718B09015.d	Synergi Hydro
LCSD 280-404355/3-A		02/09/2018 09:28	1	hfpo718B09016.d	Synergi Hydro
LLCS 280-404355/4-A		02/09/2018 09:31	1	hfpo718B09017.d	Synergi Hydro
ZZZZZ		02/09/2018 09:34	1		Synergi Hydro
ZZZZZ		02/09/2018 09:37	1		Synergi Hydro
ZZZZZ		02/09/2018 09:41	1		Synergi Hydro
ZZZZZ		02/09/2018 09:44	1		Synergi Hydro
ZZZZZ		02/09/2018 09:47	1		Synergi Hydro
ZZZZZ		02/09/2018 09:50	1		Synergi Hydro
CCV 280-404457/14		02/09/2018 09:54	1	hfpo718B09024.d	Synergi Hydro
ZZZZZ		02/09/2018 09:57	1		Synergi Hydro
ZZZZZ		02/09/2018 10:00	1		Synergi Hydro
ZZZZZ		02/09/2018 10:03	1		Synergi Hydro
ZZZZZ		02/09/2018 10:07	1		Synergi Hydro
280-105950-31		02/09/2018 10:10	1	hfpo718B09029.d	Synergi Hydro
280-105950-32		02/09/2018 10:13	1	hfpo718B09030.d	Synergi Hydro
280-105950-33		02/09/2018 10:16	1	hfpo718B09031.d	Synergi Hydro
280-105950-34		02/09/2018 10:20	1	hfpo718B09032.d	Synergi Hydro
280-105950-35		02/09/2018 10:23	1	hfpo718B09033.d	Synergi Hydro
280-105950-36		02/09/2018 10:26	1	hfpo718B09034.d	Synergi Hydro
CCV 280-404457/25		02/09/2018 10:29	1	hfpo718B09035.d	Synergi Hydro
280-105950-37		02/09/2018 10:33	1	hfpo718B09036.d	Synergi Hydro
280-105950-38		02/09/2018 10:36	1	hfpo718B09037.d	Synergi Hydro
280-105950-39		02/09/2018 10:39	1	hfpo718B09038.d	Synergi Hydro
280-105950-40		02/09/2018 10:42	1	hfpo718B09039.d	Synergi Hydro
280-105950-40 DU		02/09/2018 10:46	1	hfpo718B09040.d	Synergi Hydro
280-105950-40 MS		02/09/2018 10:49	1	hfpo718B09041.d	Synergi Hydro
CCV 280-404457/32		02/09/2018 10:52	1	hfpo718B09042.d	Synergi Hydro

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Batch Number: 403988

Batch Start Date: 02/06/18 09:31

Batch Analyst: Atkinson, Hannah M

Batch Method: 3535

Batch End Date: 02/06/18 14:14

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	HFPO I.S. 00007	HFPO Spike 00004
MB 280-403988/1		3535, 8321A				250 mL	5 mL	0.1 mL	
LCS 280-403988/2		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-403988/3		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LLCS 280-403988/4		3535, 8321A				250 mL	5 mL	0.1 mL	0.01 mL
280-105950-A-1	FAY-D-3516HEART-W1-1-013018	3535, 8321A	T	263.5 g	29.0 g	234.5 mL	5 mL	0.1 mL	
280-105950-C-2	FAY-D-3516HEART-W1-2-013018	3535, 8321A	T	281.5 g	28.3 g	253.2 mL	5 mL	0.1 mL	
280-105950-A-3	FAY-D-3521HEART-W1-1-013018	3535, 8321A	T	269.2 g	27.7 g	241.5 mL	5 mL	0.1 mL	
280-105950-B-4	FAY-D-3521HEART-W1-2-013018	3535, 8321A	T	267.5 g	28.1 g	239.4 mL	5 mL	0.1 mL	
280-105950-B-5	FAY-D-3619HEART-W1-1-013018	3535, 8321A	T	277.0 g	28.6 g	248.4 mL	5 mL	0.1 mL	
280-105950-C-6	FAY-D-3619HEART-W1-2-013018	3535, 8321A	T	269.0 g	27.5 g	241.5 mL	5 mL	0.1 mL	
280-105950-D-7	FAY-D-3615HEART-W1-1-013018	3535, 8321A	T	271.0 g	27.6 g	243.4 mL	5 mL	0.1 mL	
280-105950-D-8	FAY-D-3615HEART-W1-2-013018	3535, 8321A	T	266.0 g	28.9 g	237.1 mL	5 mL	0.1 mL	
280-105950-D-9	FAY-D-3634HEART-W1-1-013018	3535, 8321A	T	273.6 g	28.2 g	245.4 mL	5 mL	0.1 mL	
280-105950-D-10	FAY-D-3634HEART-W1-2-013018	3535, 8321A	T	272.8 g	28.0 g	244.8 mL	5 mL	0.1 mL	
280-105950-D-11	FAY-D-FB-013018	3535, 8321A	T	281.1 g	27.6 g	253.5 mL	5 mL	0.1 mL	
280-105950-D-12	FAY-D-46MEDOW-W1-1-013018	3535, 8321A	T	273.0 g	28.0 g	245 mL	5 mL	0.1 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Batch Number: 403988

Batch Start Date: 02/06/18 09:31

Batch Analyst: Atkinson, Hannah M

Batch Method: 3535

Batch End Date: 02/06/18 14:14

Batch Notes	
Acid ID	2% Formic Aci_00141
Acid Name	2% Formic Acid
Balance ID	24350888
Batch Comment	Reviewer:KI
First End time	1056
H2O ID	HPLC_Water_00850
Pipette ID	m2, SPE-1+ syringe
Reagent ID	10% NH4OH
Reagent Lot Number	10% NH4OH_00117
Solvent Lot #	Methanol_00190
Solvent Name	Methanol
SOP Number	DV-OP-0019
SPE Cartridge Type	STRATA-X-AW (8B S038 FCH)
Solid Phase Extraction Disk ID	S308-0079
First Start time	949

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Batch Number: 404157

Batch Start Date: 02/07/18 10:33

Batch Analyst: Atkinson, Hannah M

Batch Method: 3535

Batch End Date: 02/07/18 14:38

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	HFPO I.S. 00007	HFPO Spike 00004
MB 280-404157/1		3535, 8321A				250 mL	5 mL	0.1 mL	
LCS 280-404157/2		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-404157/3		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LLCS 280-404157/4		3535, 8321A				250 mL	5 mL	0.1 mL	0.01 mL
280-105950-C-13	FAY-D-196UPTON-W 1-1-013018	3535, 8321A	T	281.6 g	28.7 g	252.9 mL	5 mL	0.1 mL	
280-105950-C-14	FAY-D-170MEDOW-W 1-1-013018	3535, 8321A	T	283.6 g	28.3 g	255.3 mL	5 mL	0.1 mL	
280-105950-D-14	FAY-D-170MEDOW-W DU 1-1-013018	3535, 8321A	T	257.9 g	28.6 g	229.3 mL	5 mL	0.1 mL	
280-105950-G-14	FAY-D-170MEDOW-W MS 1-1-013018	3535, 8321A	T	280.1 g	28.0 g	252.1 mL	5 mL	0.1 mL	0.1 mL
280-105950-C-15	FAY-D-170MEDOW-W 1-1-013018-D	3535, 8321A	T	257.7 g	27.8 g	229.9 mL	5 mL	0.1 mL	
280-105950-C-16	FAY-D-102UPTON-W 1-1-013018	3535, 8321A	T	276.4 g	27.9 g	248.5 mL	5 mL	0.1 mL	
280-105950-A-17	FAY-D-121HILLT-W 1-1-013018	3535, 8321A	T	282.6 g	27.8 g	254.8 mL	5 mL	0.1 mL	
280-105950-A-18	FAY-D-99DRYES-W1 -1-013018	3535, 8321A	T	276.6 g	28.0 g	248.6 mL	5 mL	0.1 mL	
280-105950-B-19	FAY-D-6110CHKFT- W1-1-013018	3535, 8321A	T	278.6 g	28.3 g	250.3 mL	5 mL	0.1 mL	
280-105950-B-20	FAY-D-6695CHKFT- W1-1-013018	3535, 8321A	T	273.6 g	28.1 g	245.5 mL	5 mL	0.1 mL	
280-105950-A-21	FAY-D-3662HEART- W1-1-013018	3535, 8321A	T	268.3 g	29.0 g	239.3 mL	5 mL	0.1 mL	
280-105950-A-22	FAY-D-3662HEART- W1-2-013018	3535, 8321A	T	281.5 g	29.1 g	252.4 mL	5 mL	0.1 mL	
280-105950-A-23	FAY-D-3655HEART- W1-1-013018	3535, 8321A	T	282.9 g	28.0 g	254.9 mL	5 mL	0.1 mL	
280-105950-A-24	FAY-D-3655HEART- W1-2-013018	3535, 8321A	T	277.4 g	28.4 g	249 mL	5 mL	0.1 mL	
280-105950-A-25	FAY-D-3720HEART- W1-1-013018	3535, 8321A	T	283.0 g	28.8 g	254.2 mL	5 mL	0.1 mL	
280-105950-D-26	FAY-D-3720HEART- W2-1-013018	3535, 8321A	T	286.3 g	28.3 g	258 mL	5 mL	0.1 mL	
280-105950-B-27	FAY-D-3721HEART- W1-1-013018	3535, 8321A	T	284.0 g	28.1 g	255.9 mL	5 mL	0.1 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Batch Number: 404157

Batch Start Date: 02/07/18 10:33

Batch Analyst: Atkinson, Hannah M

Batch Method: 3535

Batch End Date: 02/07/18 14:38

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	HFPO I.S. 00007	HFPO Spike 00004
280-105950-C-28	FAY-D-3721HEART-W1-2-013018	3535, 8321A	T	276.6 g	29.0 g	247.6 mL	5 mL	0.1 mL	
280-105950-C-29	FAY-D-3745HEART-W1-1-013018	3535, 8321A	T	275.2 g	27.8 g	247.4 mL	5 mL	0.1 mL	
280-105950-A-30	FAY-D-3745HEART-W1-2-013018	3535, 8321A	T	283.8 g	28.9 g	254.9 mL	5 mL	0.1 mL	

Batch Notes

Acid ID	2% Formic Aci_00141
Acid Name	2% Formic Acid
Balance ID	24350888
Batch Comment	Reviewer:KI
First End time	1200
H2O ID	HPLC_Water_00850
Pipette ID	m2, SPE-1+ syringe
Reagent ID	10% NH4OH
Reagent Lot Number	10% NH4OH_00117
Solvent Lot #	Methanol_00190
Solvent Name	Methanol
SOP Number	DV-OP-0019
SPE Cartridge Type	STRATA-X-AW (8B S038 FCH)
Solid Phase Extraction Disk ID	S308-0079
First Start time	1055

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8321A

Page 2 of 2

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Batch Number: 404355

Batch Start Date: 02/08/18 17:57

Batch Analyst: Cokley, Cheyana D

Batch Method: 3535

Batch End Date: 02/08/18 20:23

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	HFPO I.S. 00008	HFPO Spike 00004
MB 280-404355/1		3535, 8321A				250 mL	5 mL	0.1 mL	
LCS 280-404355/2		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-404355/3		3535, 8321A				250 mL	5 mL	0.1 mL	0.1 mL
LLCS 280-404355/4		3535, 8321A				250 mL	5 mL	0.1 mL	0.01 mL
280-105950-B-31	FAY-D-3765HEART-W1-1-013018	3535, 8321A	T	309.9 g	28.0 g	281.9 mL	5 mL	0.1 mL	
280-105950-C-32	FAY-D-6676NC87H-W1-1-013018	3535, 8321A	T	317.6 g	28.9 g	288.7 mL	5 mL	0.1 mL	
280-105950-C-33	FAY-D-6740NC87H-W1-1-013018	3535, 8321A	T	280.8 g	28.8 g	252 mL	5 mL	0.1 mL	
280-105950-B-34	FAY-D-6740NC87H-W1-2-013018	3535, 8321A	T	325.8 g	28.5 g	297.3 mL	5 mL	0.1 mL	
280-105950-B-35	FAY-D-3833Heart-W1-1-013018	3535, 8321A	T	305.9 g	28.6 g	277.3 mL	5 mL	0.1 mL	
280-105950-D-36	FAY-D-3833Heart-W1-2-013018	3535, 8321A	T	328.2 g	28.5 g	299.7 mL	5 mL	0.1 mL	
280-105950-A-37	FAY-D-3624PNEBR-W1-1-013018	3535, 8321A	T	295.5 g	28.5 g	267 mL	5 mL	0.1 mL	
280-105950-D-38	FAY-D-3624PNEBR-W1-2-013018D	3535, 8321A	T	303.8 g	28.5 g	275.3 mL	5 mL	0.1 mL	
280-105950-B-39	FAY-D-3833HEART-W1-1-013018D	3535, 8321A	T	305.1 g	27.8 g	277.3 mL	5 mL	0.1 mL	
280-105950-A-40	FAY-D-3624PNEBR-W1-2-013018	3535, 8321A	T	308.5 g	28.3 g	280.2 mL	5 mL	0.1 mL	
280-105950-B-40	FAY-D-3624PNEBR-W1-2-013018 DU	3535, 8321A	T	296.8 g	28.3 g	268.5 mL	5 mL	0.1 mL	
280-105950-C-40 MS	FAY-D-3624PNEBR-W1-2-013018	3535, 8321A	T	290.3 g	28.4 g	261.9 mL	5 mL	0.1 mL	0.1 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Denver

Job No.: 280-105950-1

SDG No.:

Batch Number: 404355

Batch Start Date: 02/08/18 17:57

Batch Analyst: Cokley, Cheyana D

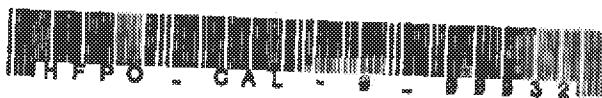
Batch Method: 3535

Batch End Date: 02/08/18 20:23

Batch Notes	
Acid ID	2% Formic Aci_00141
Acid Name	2% Formic Acid
Balance ID	24350888
Batch Comment	Reviewer:CDC
First End time	2.8.18@1901
H2O ID	HPLC_Water_00850
Pipette ID	F, SPE-1+ syringe
Reagent ID	10% NH4OH
Reagent Lot Number	10% NH4OH_00118
Solvent Lot #	Methanol_00190
Solvent Name	Methanol
SOP Number	DV-OP-0019
SPE Cartridge Type	STRATA-X-AW (8B S038 FCH)
Solid Phase Extraction Disk ID	S308-0079
First Start time	2.8.18@1810

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

**Reagent ID:** HFPO_CAL-0_00032

Description:	Blank	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	PFC_DIL_Solvent
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4956304		
Comment:	ICB		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DK	HFPO_IS_00006	12/12/2018	0.00000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO_IS_00006	12/12/2018	0.00000	ug/mL	10.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO_IS_00006	Internal Standard for HFPO 0.0ug/ml		12/12/18				20.00000	uL

Chubbs
2/12/18

**Reagent ID:** HFPO_CAL-1_00032

Description:	level1	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H2O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4956305		
Comment:	level1		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO LS_00008	12/12/2018	0.00000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO LS_00008	12/12/2018	0.00000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropane) acid	HFPO Spike_00004	10/30/2018	0.00000	ug/mL	0.25000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO LS_00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LO6 Calibration Spike 0.8ug/ml		10/30/18				0.50000	uL

Chaitin

2.1(1/V)



Reagent ID: **HFPO_CAL-2_00033**

Description:	level2	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H ₂ O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4956307		
Comment:	level-2		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C8 HFPO-DA	HFPO LS_00008	12/12/2018	0.00000	ug/mL	10.00000	ug/L
13C8 HFPO-DA (IS)	HFPO LS_00008	12/12/2018	0.00000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropanoic) acid	HFPO Spike_00004	10/30/2018	0.00000	ug/mL	0.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO LS_00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LC8/Calibration Spike 0.8ug/ml		10/30/18				1.00000	uL

John Meyer

2/12/18



Reagent ID: **HFPO_CAL-3_00032**

Description:	level3	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Locator:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H2O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4956308		
Comment:	level-3		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO_IS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO_IS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropano) acid	HFPO_Spike_00014	10/30/2018	0.50000	ug/mL	1.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO_IS_00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO_Spike_00014	HFPO LC/MS Calibration Spike 0.8ug/ml		10/30/18				2.00000	uL

chubron

2/12/18



Reagent ID: **HFPO_CAL-4_00032**

Description:	level4	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H ₂ O
Creation Date:	02/08/2018	Solvent Lot:	00018
Open Date:			
Container(s):	4956319		
Comment:	level4		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO LS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO LS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropenoic) acid	HFPO Spike_00004	10/30/2018	0.50000	ug/mL	2.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO LS_00008	Internal Standard for HFPO 0.5ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LCSCalibration Spike 0.5ug/ml		10/30/18				4.00000	uL

Chloroform

2/2/18



Reagent ID: **HFPO_CAL-5_00080**

Description:	level5	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H ₂ O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4856387		
Comment:	level-5		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3-HFPO-DA	HFPO_I.S._00008	12/12/2018	0.50000	ug/ml	10.00000	ug/L
13C3-HFPO-DA (IS)	HFPO_I.S._00008	12/12/2018	0.50000	ug/ml	10.00000	ug/L
Perfluoro(2-propylpropano) add	HFPO_Spike_00004	10/30/2018	0.50000	ug/ml	5.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO_I.S._00008	Internal Standard for HFPO 0.5ug/ml		12/12/18				20.00000	uL
HFPO_Spike_00004	HFPO LC/S Calibration Spike 0.5ug/ml		10/30/18				10.00000	uL

John P. Morrison

2/12/18



Reagent ID: **HFPO_CAL-6_00080**

Description:	level 6	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H ₂ O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4055338		
Comment:	level 6		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO_I.S._00008	12/12/2018	0.00000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (10)	HFPO_I.S._00008	12/12/2018	0.00000	ug/mL	10.00000	ug/L
Perfluoro(3-propoxypropanoic) acid	HFPO_Spike_00004	10/30/2018	0.00000	ug/mL	10.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO_I.S._00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO_Spike_00004	HFPO LC/IC Calibration Spike 0.8ug/ml		10/30/18				20.00000	uL

chmeyer1

2/12/18



Reagent ID: **HFPO_CAL-7_00032**

Description:	level7	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H ₂ O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4900339		
Comment:	level7		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DX	HFPO I.S._00008	12/12/2018	0.00000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO I.S._00008	12/12/2018	0.00000	ug/mL	10.00000	ug/L
Perfluoro(<i>β</i> -propoxypropionic) acid	HFPO Spike_00004	10/30/2018	0.00000	ug/ml	25.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO I.S._00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LC/Calibration Spike 0.8ug/ml		10/30/18				50.00000	uL

Chadip
1/2/18



Reagent ID: **HFPO_CAL-8_00032**

Description:	level8	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H ₂ O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4956340		
Comment:	level-8		

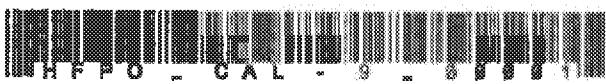
Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO_I.S._00008	12/12/2018	0.30000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO_I.S._00008	12/12/2018	0.30000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropanoic) acid	HFPO_Spike_00004	10/30/2018	0.30000	ug/mL	50.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO_I.S._00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO_Spike_00004	HFPO LC/S Calibration Spike 0.8ug/ml		10/30/18				100.00000	uL

chuckpern
1/2/18



Reagent ID: HFPO_CAL-9_00001

Description:	level9	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H ₂ O
Creation Date:	02/08/2018	Solvent Lot#:	00018
Open Date:			
Container(s):	4956342		
Comment:	level-9		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO LS_00008	12/12/2018	0.60000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO LS_00008	12/12/2018	0.60000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropene) acid	HFPO Spike_00004	10/30/2018	0.60000	ug/mL	100.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO LS_00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LC/S Calibration Spike 0.6ug/ml		10/30/18				200.00000	uL

JW/KBM
2/12/18



Reagent ID: HFPO_ICV_00034

Description:	ICV	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Moyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H ₂ O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4956341		
Comment:	ICV		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Concentration	Source Concentration Units	Final Concentration	Final Concentration Units
13C3 HFPO-DA	HFPO I.S._00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO I.S._00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropanoic) acid	HFPO ICV_00001	11/03/2018	0.19500	ug/mL	1.95000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO I.S._00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO ICV_00001	ICV HFPO primary		11/03/18				10.00000	uL

✓ (initials)
2/12/18



Reagent ID: **HFFPO_CAL-0_00032**

Description:	Blank	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	PFC_DIL_Solvent
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4956304		
Comment:	ICB		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFFPO-DA	HFFPO LS_00008	12/12/2018	0.00000	ug/mL	10.00000	ug/L
13C3 HFFPO-DA (IS)	HFFPO LS_00008	12/12/2018	0.00000	ug/mL	10.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFFPO LS_00008	Internal Standard for HFFPO 0.0ug/ml		12/12/18				20.00000	uL

John P. Meyer
2/8/18



Reagent ID: **HFPO_CAL-1_00032**

Description:	level1	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H2O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4956305		
Comment:	level-1		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C1 HFPO-DA	HFPO LS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO LS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropanoic) acid	HFPO Spike_00004	10/30/2018	0.50000	ug/mL	0.25000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO LS_00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LOS/Calibration Spike 0.5ug/ml		10/30/18				0.50000	uL

chitofbm
2/17/18



Reagent ID: **HFPO_CAL-2_00033**

Description:	level2	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	60:20 Methanol : H ₂ O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4956307		
Comment:	level-2		

Reagent Analyte Information

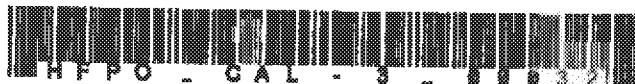
Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO I.S._00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO I.S._00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropanoic) acid	HFPO Spike_00004	10/30/2018	0.50000	ug/mL	0.50000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO I.S._00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LC/Calibration Spike 0.8ug/ml		10/30/18				1.00000	uL

checkDW

2/1/18



Reagent ID: HFPO_CAL-3_00032

Description:	level3	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Mayer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H2O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4958309		
Comment:	level-3		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO LS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO LS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropanoic) acid	HFPO Spike_00004	10/30/2018	0.50000	ug/mL	1.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO LS_00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LC/Calibration Spike 0.8ug/ml		10/30/18				2.00000	uL

Chloroform
20/103



Reagent ID: HFPO_CAL-4_00032

Description:	level4	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Mayer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H2O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4956319		
Comment:	level-4		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Cons.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO I.S._00008	12/12/2018	0.50000	ug/mL	10.00000	uL
13C3 HFPO-DA (IS)	HFPO I.S._00008	12/12/2018	0.50000	ug/mL	10.00000	uL
Perfluoro(2-propoxypropanoic) acid	HFPO Spike_00004	10/30/2018	0.50000	ug/mL	2.00000	uL

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO I.S._00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LC/Calibration Spike 0.8ug/ml		10/30/18				4.00000	uL

ChukPam
3/2/18



Reagent ID: **HFPO_CAL-6_00080**

Description:	level5	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H ₂ O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4958337		
Comment:	level-5		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Cons.	Source Cons. Units	Final Conc.	Final Conc. Units
18C3 HFPO-DA	HFPO LS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
18C3 HFPO-DA (S)	HFPO LS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropanoic) acid	HFPO Spike_00004	10/30/2018	0.50000	ug/mL	5.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO LS_00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LC&Calibration Spike 0.8ug/ml		10/30/18				10.00000	uL

02/08/2018
2/11/18



Reagent ID: **HFPO_CAL-6_00080**

Description:	level6	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Mayer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H2O
Creation Date:	02/08/2018 -	Solvent Lot:	00018
Open Date:			
Container(s):	4856338		
Comment:	level-6		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO LS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO IS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
Perfluor(2-propoxypropanoic) acid	HFPO Spike_00004	10/30/2018	0.50000	ug/mL	10.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO LS_00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LCS/Calibration Spike 0.8ug/ml		10/30/18				20.00000	uL

On Hold
2/1/18



Reagent ID: **HFPO_CAL-7_00032**

Description:	level7	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H ₂ O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4958339		
Comment:	level-7		

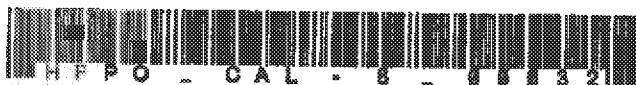
Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO LS_00008	12/12/2018	0.50000	ug/ml.	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO LS_00008	12/12/2018	0.50000	ug/ml.	10.00000	ug/L
Perfluoro(2-propoxypropanoic) acid	HFPO Spike_00004	10/30/2018	0.50000	ug/ml.	25.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO LS_00008	Internal Standard for HFPO 0.8ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LC3/Calibration Spike 0.8ug/ml		10/30/18				50.00000	uL

Chubpon
2/9/18



Reagent ID: **HFPO_CAL-8_00032**

Description:	level8	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Mayer, Andrew QC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H ₂ O
Creation Date:	02/08/2018	Solvent Lot#:	00016
Open Date:			
Container(s):	4956340		
Comment:	level-8		

Reagent Analyte Information

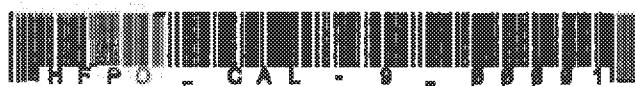
Analyte	Source ID	Source Expi. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO I.S._00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (S)	HFPO I.S._00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropanoic) acid	HFPO Spike_00004	10/30/2018	0.50000	ug/mL	50.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO I.S._00008	Internal Standard for HFPO 0.5ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LCS/Calibration Spike 0.5ug/ml		10/30/18				100.00000	uL

Chadwick

2/8/18



Reagent ID: **HFPO_CAL-9_00001**

Description:	level9	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	50:20 Methanol : H2O
Creation Date:	02/08/2018	Solvent Lot:	00018
Open Date:			
Container(s):	4956342		
Comment:	level-9		

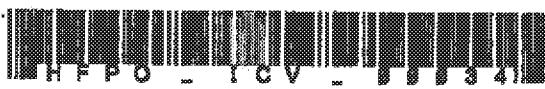
Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO I.S._00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO I.S._00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropenoic) acid	HFPO Spike_00004	10/30/2018	0.50000	ug/mL	100.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO I.S._00008	Internal Standard for HFPO 0.5ug/ml		12/12/18				20.00000	uL
HFPO Spike_00004	HFPO LCS/Calibration Spike 0.5ug/ml		10/30/18				200.00000	uL

chuckfawn
2/8/18



Reagent ID: **HFPO_ICV_00034**

Description:	ICV	Expiration Date:	02/22/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Mayer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	50:20 Methanol : H ₂ O
Creation Date:	02/08/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4958341		
Comment:	ICV		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO_IS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (IS)	HFPO_IS_00008	12/12/2018	0.50000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropanoic) acid	HFPO ICV_00001	11/03/2018	0.19500	ug/mL	1.95000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO IS_00008	Internal Standard for HFPO 0.8ug/mL		12/12/18				20.00000	uL
HFPO ICV_00001	ICV HFPO purity		11/03/18				10.00000	uL

John Mori
2/8/18

Reagent ID: **HFPO_CAL-5_00079**

Description:	level5	Expiration Date:	02/09/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	80:20 Methanol : H2O
Creation Date:	01/26/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4935570		
Comment:	level-5		

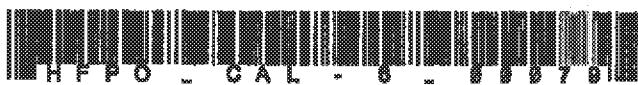
Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO LS_00004	08/28/2018	0.50000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (S)	HFPO LS_00004	08/28/2018	0.50000	ug/mL	10.00000	ug/L
Perfluoro(2-propoxypropanoic) acid	HFPO Spike_00004	10/30/2018	0.50000	ug/mL	5.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO LS_00004	Internal Standard for HFPO 0.5ug/ml		08/28/18				20.00000	uL
HFPO Spike_00004	HFPO LCSCalibration Spike 0.5ug/ml		10/30/18				10.00000	uL

Chad Form
2/28/18



HFPO_CAL-6_00079

Reagent ID: **HFPO_CAL-6_00079**

Description:	level6	Expiration Date:	02/08/2018
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	LCMS	Prepared By:	Meyer, Andrew GC
Reagent Volume:	1.000 mL	Solvent:	90:20 Methanol : H ₂ O
Creation Date:	01/28/2018	Solvent Lot:	00016
Open Date:			
Container(s):	4038571		
Comment:	level-6		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
13C3 HFPO-DA	HFPO_1.6_00004	08/28/2018	0.50000	ug/mL	10.00000	ug/L
13C3 HFPO-DA (S)	HFPO_1.6_00004	08/28/2018	0.50000	ug/mL	10.00000	ug/L
Perfluoro(2-propylpropanoic) acid	HFPO_Spike_00004	10/30/2018	0.50000	ug/mL	10.00000	ug/L

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
HFPO_1.6_00004	Internal Standard for HFPO 0.8ug/ml		08/28/18				20.00000	uL
HFPO_Spike_00004	HFPO LC/IC Calibration Spike 0.6ug/ml		10/30/18				20.00000	uL

HFPO-DA
2.0 ug/ml

Shipping and Receiving Documents

TestAmerica Denver
4935 Tenny Street
Aurora, CO 80012
Phone: (303) 736-0100 | Fax: (303) 731-7177

Received Case Received via e-mail | 2/15/18
2807-05750 Chain of Custody Record

TestAmerica
TESTING. CERTIFICATION. INSPECTION. INVESTIGATION.

Client Information		Sample		Lab POC		Case Number		Analysis Requested		Preservation Dates		
Client Contact:	Mr. Michael Auction	Phone:	720-221-5750	E-Mail:	michael.auction@aecon.com	Case #:	2807-05750	Date:	2/15/18	Page:	2	
Company:	The Chemique Company PC, LLC	Address:	104 ECOM 405 Ogden Road Suite 300	Date Sample Taken:		POC:		Sample Date:		Matrix:		
City:	Newark	Phone:	302-701-5872	Time Sample Taken:		WD#:	BIO-6704834201000-2231CS1000	Sample Time:		Type:		
State, Zip:	DE, 19713	Email:	michael.auction@aecon.com	Project Name:	Project #:	Sample ID:	C-Gram, C-Grab, V-Gram, V-Grab	Sample ID:		Comments:		
Phone:		Project Name:	FAV-2018 Residential Sampling	Site:	2807-057504	Specimen:		Specimen:		Special Instructions/Notes:		
Hazardous Materials Testing												
Sample Identification												
Possible Hazardous Material:	Unknown	Flammable	Corrosive	Explosive	Inhalation Hazard	Reactive	Radioactive	Other	None	Sample Disposal & Return Method:		
Reinforced by:	Date/Time:	Comments:	Reinforced by:	Date/Time:	Comments:							
Reinforced by:	Date/Time:	Comments:	Reinforced by:	Date/Time:	Comments:							
Customer Status Update		Customer Seal No.: Yes / No	Customer Seal No.: Yes / No		Customer Seal No.: Yes / No		Customer Seal No.: Yes / No		Customer Seal No.: Yes / No		Customer Seal No.: Yes / No	

TestAmerica Denver

4055 Vandy Street
Aveida CO 80102
Phone (303) 736-0100 Fax (303) 437-7771

Received: 11/27/2018 **Entered:** 11/27/2018 **By:** TestAmerica Denver

Chain of Custody Record

Client Information		Sample Info		Lab Processing		Comments		Preservation Codes	
Client Name:	Project Name:	Sample ID:	Sample Desc:	Lab Tech:	Technician Initials:	Comments:	Received Date:	SC#:	Page #:
Mr. Michael Alcorn									
Company:	TimeChemours Company LLC								
Address:	201 RECOM 405 - Ogallala Road, Suite 300 Newark, DE 19713								
Phone:	(302) 781-5873								
Email:	michael.alcorn@acs.com								
Project Name:	FAY-D-3624 PNEBR-WI-143618								
Spec:	2018 Residential Sampling								
HPLC-MS/MS									
Sample Identification									
FAY-D-3624 PNEBR-WI-143618		2018	SLIS	G	N	X			
(Add 2 12/18/2018 / PRD)		2018	SLIS	G	N	X			
Deliverables Requested:									
Empty Kit Reinducted by:									
Purchased by:		Date/Time:	Comments:	Date/Time:	Comments:	Date/Time:	Comments:	Date/Time:	Comments:
Reinforced by:		Date/Time:	Comments:	Date/Time:	Comments:	Date/Time:	Comments:	Date/Time:	Comments:
Reinforced by:		Date/Time:	Comments:	Date/Time:	Comments:	Date/Time:	Comments:	Date/Time:	Comments:
Custody Seal intact:		Custody Seal No.:	W/ Yes X No	Custody Seal intact Other Remarks:					
Possible Hazard Identification:									
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison E <input type="checkbox"/> Unknown <input type="checkbox"/> Explosive									
Deliverables Requested:									
Return To Client: <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Return To Customer <input type="checkbox"/> Return To Supplier									
Special Instructions/QC Requirements:									
Date:	Time:	Date:	Time:	Date:	Time:	Date:	Time:	Date:	Time:

TestAmerica Denver
4956 Yarrow Street
Aurora, CO 80012
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

TestAmerica
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Client Information

Client Name: Mr. Michael Auscjan	Address: The Chemours Company FC, LLC c/o AECOM 4051 Ogletown Road, Suite 300 City: Newark State: DE Zip: 19713 Phone: 302-815-5873 Email: michael.auscjan@aecom.com Project Name: FAY-2018 Residential Sampling Site	Sample ID: 704-600-5746	Lab Test: I.B	Lab Test: Michelle E. Kell	Caller Tracking Notes:
		Date:	Page:	Page:	Page:
		of	of	of	of
		Box #:			

Analysis Requested

Due Date Requested: TAT Requested (days): 10 Business Days	Sample Date: 1/30/18	Sample Time: 0825	Sample Type: (Cultures, Grab, Matrix, etc.) W	Matrix (sample, media, container, label): W	Special Instructions/Note: Hold all remains as certain.
PO #: LEIO-671488420100-2231081000	Sample Date: 1/30/18	Sample Time: 0823	Sample Type: (Cultures, Grab, Matrix, etc.) W	Matrix (sample, media, container, label): W	
Project #: 2016094	Sample Date: 1/30/18	Sample Time: 0846	Sample Type: (Cultures, Grab, Matrix, etc.) W	Matrix (sample, media, container, label): W	
	Sample Date: 1/30/18	Sample Time: 1133	Sample Type: (Cultures, Grab, Matrix, etc.) W	Matrix (sample, media, container, label): W	
	Sample Date: 1/30/18	Sample Time: 0910	Sample Type: (Cultures, Grab, Matrix, etc.) W	Matrix (sample, media, container, label): W	
	Sample Date: 1/30/18	Sample Time: 0934	Sample Type: (Cultures, Grab, Matrix, etc.) W	Matrix (sample, media, container, label): W	
	Sample Date: 1/30/18	Sample Time: 0935	Sample Type: (Cultures, Grab, Matrix, etc.) W	Matrix (sample, media, container, label): W	
	Sample Date: 1/30/18	Sample Time: 1002	Sample Type: (Cultures, Grab, Matrix, etc.) W	Matrix (sample, media, container, label): W	
	Sample Date: 1/30/18	Sample Time: 1023	Sample Type: (Cultures, Grab, Matrix, etc.) W	Matrix (sample, media, container, label): W	
	Sample Date: 1/30/18	Sample Time: 1300	Sample Type: (Cultures, Grab, Matrix, etc.) W	Matrix (sample, media, container, label): W	

Positive Hazard Identification

<input type="checkbox"/> Non-Hazardous	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison A	<input type="checkbox"/> Unknown	<input type="checkbox"/> Pathological
Unlistable Requested: I, II, III, IV, V, Other (specify): Level IV					

Empty Kit Pesticides used by:

Received By:	Date/Time:	Received By:	Date/Time:
Repackaged By:	Date/Time:	Repackaged By:	Date/Time:

Custody Seal intact:

Yes: <input checked="" type="checkbox"/>	No: <input type="checkbox"/>	Custody Seal No.: 000000056-00604
--	------------------------------	-----------------------------------

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month):	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Active For: Months
Special instructions/OC Requirements:			

Time:	Received By:
Time:	Received By:

Time:	Received By:
Time:	Received By:

Time:	Received By:
Time:	Received By:

Time:	Received By:
Time:	Received By:

Time:	Received By:
Time:	Received By:

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Time:	Received By:

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Time:	Received By:

Time:	Received By:
Time:	Received By:

Time:	Received By:
Time:	Received By:

TestAmerica Denver

4065 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

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Client Information		Samples		Case File		Carrier Tracking No(s)		Case No.		Page	
Mr. Michael Autioin Company: The Chemours Company F.C. Inc. Address: 300 AECOM 4051 Ogletown Road, Suite 300 City: Newark State: DE DE 19713 Phone: 302-731-5873 Email: michael.autioin@chem.com Project Name: FAY-2018 Residential Sampling Other:	Sample Type CM Phone 704-600-5746	Case File E-mail michelle.johnston@testamericanainc.com	Fax & Fax								
Analysis Requested											
Preservation Codes:											
A - HCl M - H2SO4 B - NaOH N - None C - Zn Acetate O - AceticO2 D - Merc. Acid P - NaHCO3 E - NaHSO3 Q - Na2B4O7 F - MeOH R - Na2S2O3 G - Ammonia S - H2SO4 H - Acetic Acid T - TSP Electrolyte I - CS U - Acetone J - DI Water V - Me2A K - EDTA W - Me4G L - EDDA Z - Other Specific Owner:											
Total Number of Contaminants											
Special Instructions/Note:											
HPLC-DAD/MS/MS											
Low to High Priority Analytes Parallel Processing											
Sample Identification		Sample Date	Sample Time	Sample Type (Carcine, Gragrat)	Matrix (Femal, Male, Composite, Unknown, Anal)	Preservation Code					
FAY-D-46 MEDOW-WI-1-013018	01/30/18	6:30	C	N	X						
FAY-D-46 LIPTON-WI-1-013018	01/30/18	08:58	C	N	X						
FAY-D-170 MEDOW-WI-1-013018 & Rep	01/30/18	09:17	C	B	X						
FAY-D-170 MEDOW-WI-1-013018	01/30/18	09:17	C	W	X						
FAY-D-170 MEDOW-WI-1-013018-MS	01/30/18	09:17	C	W	X						
FAY-D-170 MEDOW-WI-1-013018-D	01/30/18	09:17	C	B	X						
FAY-D-180 UPTON-WI-1-013018	01/30/18	09:52	G	N	X						
FAY-D-190 MILET-WI-1-013018	01/30/18	10:15	G	B	X						
FAY-D-94 DAVYES-WI-1-013018	01/30/18	11:16	G	B	X						
FAY-D-6110 CHARTER-WI-1-013018	01/30/18	11:58	G	B	X						
FAY-D-6695 CHARTER-WI-1-013018	01/30/18	12:20	G	B	X						
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)											
<input type="checkbox"/> Return To Client <input type="checkbox"/> Destroy By Lab											
Special Instructions/QC Requirements:											
Empty Kit Relinquished by		Date/Time	Signature	Date/Time		Signature	Date/Time		Signature	Date/Time	
Requested by		Date/Time	Received by	Date/Time		Received by	Date/Time		Received by	Date/Time	
Relinquished by		Date/Time	Received by	Date/Time		Received by	Date/Time		Received by	Date/Time	
Custody Seals intact		Custody Seal No:									
A. Yes B. No											

TestAmerica Denver

4950 Yarrow Street
Aurora, CO 80012
Phone: (303) 735-0100 Fax: (303) 431-7171

Chain of Custody Record

Client Information		Sample ID	CP	Lab ID	Customer Name	Customer Address	Customer Phone	Customer Email	Customer Tracking Number	QC Ref.
Customer Contact: Mr. Michael Auton Company: The Chambers Company FC, LLC Address: 600 AECOM, 4061 Dahlstrom Road, Suite 300 City: Newark State: DE DE 19713 Phone: 302-781-5873 Email: michael.auton@chambers.com Project Name: PAY-2018 Residential Sampling Site:		704-600-5746			Johnson, Michelle FKA: michelle.johnson@testamericaic.com					
Analysis Requested										
HPLC-DAD/MS/MS										
HPLC-DAD/MS/MS										
Date Requested:		TAT Requested (days): 10 Business Days		Preservation Codes:		Special Instructions/Note:				
Sample Identification		Sample Date	Sample Time	Sample Type (C=cross, G=grab)	Matrix (e.g., soil, water, etc.)	Preservation Codes:				
FAY-D-3662-H3407-W1-0843	1/30/18	1031	G	W	X	X	X	X	X	X
FAY-D-3662-H3407-W1-03518	1/30/18	1034	G	W	X	X	X	X	X	X
FAY-D-3655-H3407-W1-03518	1/30/18	1055	G	W	X	X	X	X	X	X
FAY-D-3656-H3407-W1-03518	1/30/18	1056	G	W	X	X	X	X	X	X
FAY-D-3220-H3407-W1-03018	1/30/18	1125	G	W	X	X	X	X	X	X
FAY-D-3220-H3407-W1-03018	1/30/18	1336	G	W	X	X	X	X	X	X
FAY-D-3221-H3407-W1-03018	1/30/18	1346	G	W	X	X	X	X	X	X
FAY-D-3721-H3407-W1-03018	1/30/18	1350	G	W	X	X	X	X	X	X
FAY-D-3745-H3407-W1-03018	1/30/18	1408	G	W	X	X	X	X	X	X
FAY-D-3745-H3407-W1-03018	1/30/18	1409	G	W	X	X	X	X	X	X
FAY-D-3765-H3407-W1-03018	1/30/18	1442	G	W	X	X	X	X	X	X
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)										
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab										
Special Instructions/QC Requirements:										
Method of Transport:										
Empty Kit Requisitioned by: <i>Charles Auten</i> Requisitioned By:		Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
Custody Seal intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: <i>15804616</i>								

Chain of Custody Record

Client Information		Sample:	NY K5	Date Pk'd:	Johnson, Michelle	Customer Notes:	Cust No:																																																																																										
Client Contact:	Mr. Michael Atzorn Company: The Chemours Company FC, LLC	Phone:	+764-4000-27446	Ex. #:	12404	Page:	1 of 2																																																																																										
Analysis Requested																																																																																																	
Preservation Codes: A - HCl G - HBr B - NaOH H - None C - Za Acetate I - Acetone D - Nitric Acid J - Na2CO3 E - NaHSO4 K - Na2SO4 F - MeOH L - Na3PO4 M - TSP Dispersant/AS N - Acetone O - EtOH P - Na2B4O7 Q - NaHCO3 R - Na3SCN S - H2SO4 T - TSP Dispersant/AS U - Acetone V - MeOH W - EtOH X - EDTA Y - Other (Specify) Other: <input checked="" type="checkbox"/> Non-numbered Control Number of Control Sample (YTD/ON)																																																																																																	
HPLC-DAD/LC/MS/MS																																																																																																	
Sample Identification <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Sample ID</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (Ceramic, Geogrid, etc.)</th> <th>Matrix (Soil, water, etc.)</th> <th>Preservation Code</th> </tr> </thead> <tbody> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/20/18</td><td>10:02</td><td>G</td><td>W</td><td>X N</td></tr> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/30/18</td><td>10:11</td><td>G</td><td>W</td><td>X N</td></tr> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/30/18</td><td>10:25</td><td>G</td><td>W</td><td>X N</td></tr> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/30/18</td><td>13:11</td><td>G</td><td>W</td><td>X N</td></tr> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/30/18</td><td>16:20</td><td>G</td><td>W</td><td>X N</td></tr> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/30/18</td><td>16:21</td><td>G</td><td>W</td><td>X N</td></tr> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/30/18</td><td>18:28</td><td>G</td><td>W</td><td>X N</td></tr> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/30/18</td><td>19:45</td><td>G</td><td>W</td><td>X N</td></tr> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/30/18</td><td>19:55</td><td>G</td><td>W</td><td>X N</td></tr> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/30/18</td><td>20:00</td><td>G</td><td>W</td><td>X N</td></tr> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/30/18</td><td>20:20</td><td>G</td><td>W</td><td>X N</td></tr> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/30/18</td><td>20:20</td><td>G</td><td>W</td><td>X N</td></tr> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/30/18</td><td>20:20</td><td>G</td><td>W</td><td>X N</td></tr> <tr><td>FAN-0-3633-HAST-001-1-03018</td><td>1/30/18</td><td>20:20</td><td>G</td><td>W</td><td>X N</td></tr> </tbody> </table>								Sample ID	Sample Date	Sample Time	Sample Type (Ceramic, Geogrid, etc.)	Matrix (Soil, water, etc.)	Preservation Code	FAN-0-3633-HAST-001-1-03018	1/20/18	10:02	G	W	X N	FAN-0-3633-HAST-001-1-03018	1/30/18	10:11	G	W	X N	FAN-0-3633-HAST-001-1-03018	1/30/18	10:25	G	W	X N	FAN-0-3633-HAST-001-1-03018	1/30/18	13:11	G	W	X N	FAN-0-3633-HAST-001-1-03018	1/30/18	16:20	G	W	X N	FAN-0-3633-HAST-001-1-03018	1/30/18	16:21	G	W	X N	FAN-0-3633-HAST-001-1-03018	1/30/18	18:28	G	W	X N	FAN-0-3633-HAST-001-1-03018	1/30/18	19:45	G	W	X N	FAN-0-3633-HAST-001-1-03018	1/30/18	19:55	G	W	X N	FAN-0-3633-HAST-001-1-03018	1/30/18	20:00	G	W	X N	FAN-0-3633-HAST-001-1-03018	1/30/18	20:20	G	W	X N	FAN-0-3633-HAST-001-1-03018	1/30/18	20:20	G	W	X N	FAN-0-3633-HAST-001-1-03018	1/30/18	20:20	G	W	X N	FAN-0-3633-HAST-001-1-03018	1/30/18	20:20	G	W	X N
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FAN-0-3633-HAST-001-1-03018	1/30/18	20:20	G	W	X N																																																																																												
Special Instructions/Notes: Hand all samples to customer Continuity of delivery																																																																																																	
Possible Hazard Notification <input type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (Specify): Level N Empty Kit Relinquished by: <input checked="" type="checkbox"/> Not applicable by _____ Prepared by: <input checked="" type="checkbox"/> Not applicable by _____ Custody Seal intact: Custody Seal No.: <input checked="" type="checkbox"/> and Other Reasons: _____																																																																																																	
Date Rec'd:	Date Test:	Date Result:	Date Final:	Comments:	Prepared By:	Received By:	Comments:																																																																																										
2/1/2018	2/1/2018	2/2/2018	2/3/2018	10:00 AM (cont'd) Satisfied by _____	<i>Michelle Johnson</i> TestAmerica	<i>John B. Atzorn</i> Chemours	Comments: (cont'd) _____																																																																																										
Comments:	Date:	Date:	Date:	Comments:	Prepared By:	Received By:	Comments:																																																																																										
Comments:	Date:	Date:	Date:	Comments:	Prepared By:	Received By:	Comments:																																																																																										

Chain of Custody Record

Client Information

Client Contact:	Mr. Michael Auction
Company:	The Chemours Company FC, LLC
Address:	100 AECOM, 4151 Ogikiewic Road, Suite 300 Ctry Newark State, Zip: DE, 19713
Phone:	704-600-2265 N.C.
FAX:	
E-mail:	michael.auction@aecom.com
Comments:	FAY-2018 Residential Sampling

Sample Identification

Sample ID:	Ken Structure-379 C
Lab P/M:	Johnston, Michelle
Lab E/M:	Michelle.Johnston@testamerica.com
Date:	10/4/2018
Analysis Requested:	feld sec
Comments:	(ON TO SP1 requires Analytical ID#)
HPPO-QA/LC/MS/MS	
Special Instructions/Notes:	<i>Held all Requiring U.S. Botanas</i>

Sample Identification

Sample Date:	10/31/18
Sample Time:	10:31
Matrix:	Wood
Sample Type:	C=Comp.
Preparation Date:	

FAY-0-3623H E4RT-01-2-0078

Possible Hazard Identification

<input checked="" type="checkbox"/> Non-Hazardous	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Radiological
Deliverable Requested: L, H, HI, W, Others (specify) Level IV					
Empty Kit Requisitioned by:					
Requisitioned by:	Johnston, Michelle	Received by:	Johnston, Michelle	Date:	10/31/18
Submitted by:	Johnston, Michelle	Received by:	Johnston, Michelle	Date:	10/31/18

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client Disposed By Lab

Archive For Months

Special Instructions/QC Requirements:

Number of Segments:

Date/Time:	10/31/18 10:30 AM	Date/Time:	10/31/18 10:30 AM	Date/Time:	10/31/18 10:30 AM
Comments:	Cooler Temperature/C and Other Requests	Comments:	Cooler Temperature/C and Other Requests	Comments:	Cooler Temperature/C and Other Requests

Login Sample Receipt Checklist

Client: Chemours Company FC, LLC The

Job Number: 280-105950-1

Login Number: 105950

List Source: TestAmerica Denver

List Number: 1

Creator: Gomez, Alyssa I

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	